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**CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION**

**CALSPAN CASE NO. CA95-08**

**VEHICLE #1 - 1995 FORD CONTOUR GL  
(DUAL AIR BAG-EQUIPPED)**

**VEHICLE #2 - 1994 DODGE INTREPID  
(DUAL AIR BAG EQUIPPED)**

**LOCATION - STATE OF OHIO**

**CRASH DATE - [REDACTED] 1995**

**Contract No. DTNH22-94-D-07058**

**Prepared for:**

**U.S. Department of Transportation  
National Highway Traffic Safety Administration  
Washington, D.C. 20590**



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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

# TECHNICAL REPORT STANDARD TITLE PAGE

1. <i>Report No.</i> CA95-08	2. <i>Government Accession No.</i>	3. <i>Recipient's Catalog No.</i>	
4. <i>Title and Subtitle</i> Calspan On-site Air Bag Deployment Investigation Vehicle#1 - 1995 Ford GL - dual front air bag system equipped Vehicle#2 - 1994 Dodge Intrepid - dual front air bag system equipped Location - State of Ohio		5. <i>Report Date:</i> [REDACTED] 1998	
		6. <i>Performing Organization Code</i>	
7. <i>Author(s)</i> Accident Research Group		8. <i>Performing Organization Report No.</i>	
9. <i>Performing Organization Name and Address</i> Transportation Sciences Center Accident Research Group Calspan SRL Corporation P.O. Box 400 Buffalo, New York 14225		10. <i>Work Unit No.</i> [REDACTED]	
		11. <i>Contract or Grant No.</i> DTNH22-94-D-07058	
12. <i>Sponsoring Agency Name and Address</i> U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590		13. <i>Type of Report and Period Covered</i> Technical Report Crash Date: [REDACTED] 1995	
		14. <i>Sponsoring Agency Code</i>	
15. <i>Supplementary Notes</i> On-site investigation of a head-on crash involving two vehicles equipped with dual front air bag systems.			
16. <i>Abstract</i> <p>Vehicle #1, (1995 Ford Contour GL) was traveling south in the left lane of a four lane undivided roadway when it crossed the double yellow centerline and struck the frontal plane of Vehicle #2 (1994 Dodge Intrepid) which was traveling north in the left lane. The damage and trajectory routines of the SMASH speed reconstruction program computed the impact speeds as 73 km/h (45 mph) for Vehicle #1 and 41 km/h (25 mph) for Vehicle #2 with delta Vs of 63 km/h (39 mph) for Vehicle #1 and 52 km/h (32 mph) for Vehicle #2.</p> <p>Vehicle #1 was equipped with a dual front air bag supplemental restraint system (SRS) which deployed as the result of the crash. The 16 year old male driver, who was not restrained by the available manual lap and torso belt, moved forward and contacted the inflated front left air bag. He reportedly suffered a fracture of the foot. The right front occupant, a 17 year old male, was restrained by the manual lap and torso belt. He was reportedly admitted and treated for a fracture of the neck at a pediatric unit.</p> <p>Vehicle #2 was also equipped with a dual front SRS which deployed during the crash sequence. The 41 year old female driver was restrained by the manual three point lap and torso belt. The driver's face contacted the inflated front left air bag. She sustained injuries related to the restraint belt, foot injuries from contact with the brake pedal and intruding toe pan, and a head injury from contact with the left rear occupant. She was transported via ambulance to a local trauma unit where she was admitted. The left rear occupant was a seven year old female who was not wearing the available three point manual lap and shoulder belt at the time of the crash. The girl moved forward and contacted the seat back support and the posterior aspect of the driver's head. She suffered a large laceration of the scalp, skull fracture, laceration of the dura and cerebral tissue below the fracture, and a subdural hematoma. She was transported to a pediatric unit where she arrived in an unconscious state.</p> <p>The right front passenger in Vehicle #2, a thirteen year old male (son of the driver), was restrained by the three point manual lap and torso belt. He contacted the inflated front right air bag with his facial area and was struck on the left shoulder by the unrestrained right rear occupant. He sustained a displaced fracture of the left clavicle, contusions and abrasions of the hips and was transported to a local trauma unit where he was observed over night. The right rear 11 year old female occupant was not restrained by the restraint belt. She contacted the front seat back support and right front occupant. She sustained skull fractures, contusions of the brain, lung contusions, and abrasions and contusions of the left arm and shoulder. She was transported to a pediatric unit where she arrived in an unconscious state.</p>			
17. <i>Key Words</i> Supplemental Restraint System (SRS) Fully occupied front seat positions in both vehicles AIS-5 level injury, rear seat occupant, AIS-3 front seat occupant		18. <i>Distribution Statement</i> General Public	
19. <i>Security Classif. (of this report)</i> Unclassified	20. <i>Security Classif. (of this page)</i> Unclassified	21. <i>No. of Pages</i>	22. <i>Price</i>

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**CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION****CALSPAN CASE NO. CA95-08****VEHICLE #1 - 1995 FORD CONTOUR GL  
(DUAL AIR BAG EQUIPPED)****VEHICLE #2 - 1994 DODGE INTREPID  
(DUAL AIR BAG EQUIPPED)****LOCATION - STATE OF OHIO****CRASH DATE - [REDACTED] 1995****BACKGROUND**

The Calspan Team was notified of this crash while conducting an on-site investigation in an unrelated SCI case. While interacting with the local police department in connection with the unrelated SCI case, the police provided on-scene photographs of a head-on impact between two air bag equipped vehicles where high speeds were suspected. The photographs showed major frontal damage to both vehicles and the air bag systems in both vehicles deployed. Preliminary injury information indicated that the front seat occupants in both vehicles benefitted from the air bags in mitigating injury severity. The Field Investigation Branch of the National Highway Traffic Safety Administration concurred with the initial assessment and initiated an on-site crash investigation. The vehicles were subsequently donated by the insurance company to the Transportation Safety Institute (TSI) in [REDACTED], Oklahoma to be used in research training programs.

**SUMMARY**

An on-site investigation was conducted into a two vehicle, head-on impact between a 1995 Ford Contour GL (Vehicle #1) and a 1994 Dodge Intrepid (Vehicle #2) which occurred February, 1995 in the evening hours. Vehicle #1 was traveling south in the left lane of a four lane undivided roadway when it crossed the double yellow centerline and struck the frontal plane of Vehicle #2 which was traveling north in the left lane.

Vehicle #1 was equipped with a dual front air bag supplemental restraint system (SRS) which deployed as the result of the crash. The 16 year old male driver who was not restrained by the available manual lap and torso belt moved forward and contacted the inflated front left air bag. He continued to move forward and contacted the steering assembly with his upper torso which resulted in the deformation of both the upper and lower portions of the steering wheel rim and the forward displacement of the steering column. He was transported to a local trauma center where he was reportedly treated for a fracture of the foot.

The right front occupant, a 17 year old male, was restrained by the manual lap and torso belt as evidenced by the separated stitching in the belt force limiter and contact evidence on the torso belt. As the result of the right instrument panel intrusion and the right front occupant's forward movement, his left knee contacted the glove compartment door surface in the area of the latch handle which resulted in the deformation of the metal backing plate. The passenger air bag deployed as designed and sustained a rip along the right upper rear surface as the result of snagging during the deployment sequence. The occupant was transported to a pediatric unit in a nearby city where he was reportedly admitted and treated for a fracture of the neck.

Vehicle #2 was also equipped with a dual front air bag supplemental restraint system which deployed during the crash sequence. The 41 year old female driver was restrained by the manual three point lap and torso belt. The driver's face contacted the inflated front left air bag as noted by a lipstick transfer on the face of the air bag. She sustained a contusion of the upper left shoulder area, abrasions across the chest, multiple rib fractures on the right side and contusions of the hips which were attributed to loading against the restraint belt during the crash.

Driver #2 was applying pressure to the brake pedal with her right foot at the time of crash in an attempt to avoid the crash. She suffered a Grade II open comminuted fracture of the right calcaneus and numerous fractures of the of the left metatarsal bones which were attributed to contact with the brake pedal and intruded toe pan. A 3.0 cm (1.2") laceration of the posterior aspect of Driver #2's head was attributed to contact by the unrestrained left rear occupant. She was transported via ambulance to a local trauma unit where she was admitted.

The left rear occupant in Vehicle #2 was a seven year old female (daughter of the driver) who was not wearing the available three point manual lap and shoulder belt at the time of the crash. The girl moved forward in response to vehicle braking and contacted the left front seat back support with her chest area and head restraint with her facial area. This resulted in the forward displacement of the seat back head restraint and the perforation of the rear surface of the seat back support by the subsequent rearward movement of the headrest height adjustment posts. Several broken teeth and an abrasion of the right cornea were attributed to this contact mechanism. The girl continued forward and struck the back of the driver's head which resulted in a large laceration of the scalp, skull fracture, laceration of the dura and cerebral tissue below the fracture, and a subdural hematoma. She was transported to a pediatric unit in a nearby city where she arrived in an unconscious state.

The right front passenger, a thirteen year old male (son of the driver), was restrained by the three point manual lap and torso belt. During the crash, his left knee contacted the glove compartment door surface and adjacent lower instrument panel as noted by a heavy white transfer on the instrument panel and slight indentation of the glove compartment door. His right knee contacted the right side of the glove compartment door as noted by a 5 cm (2") wide indentation and light colored transfer mark. He sustained contusions and abrasions of the hips which was attributed to loading against the lap belt. The boy contacted the inflated front right air bag with his facial area which resulted in a deformed nose with bleeding. This was consistent with the presence of heavy deposits of bodily fluids on the contact surface of the front right air bag. The boy sustained a displaced fracture of the left clavicle which was attributed to contact by the unrestrained eleven year old right rear female occupant during the crash sequence.

The 11 year old female (daughter of the driver) in the right rear occupant seating position was not restrained by the available three point manual lap and shoulder belt. She moved forward and contacted the right front seat back rest which resulted in bilateral lung contusions, and abrasions and contusions of the left arm and shoulder. As she continued forward, she contacted the right front occupant's left shoulder with her head. This resulted in fracture of the medial malleolar, skull fractures, and contusions of the brain. She was transported to a pediatric unit in a nearby city where she arrived in an unconscious state.

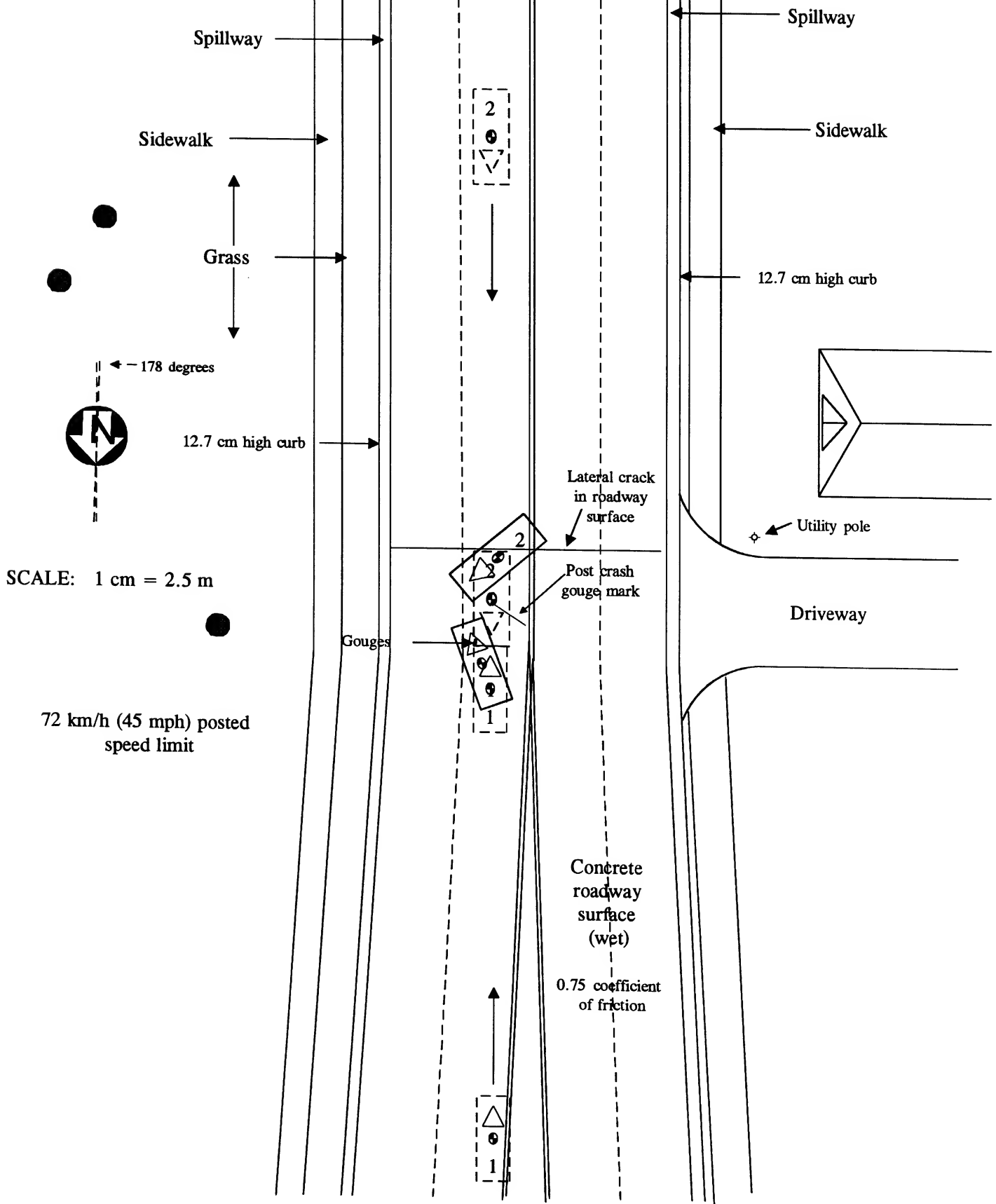
The damage pattern to the frontal plane of both vehicles represented a 100 percent overlap contact pattern in an axial collision configuration. Both vehicle damage pattern profiles exhibited an incremental downward shifting of the frame structures which were incorporated in the following Collision Deformation Classification (CDC) codes:

- Vehicle #1 - 52-FDEW-4 (12 o'clock PDOF + 40 incremental downward shift)
- Vehicle #2 - 52-FDEW-3 (12 o'clock PDOF + 40 incremental downward shift)

The damage and trajectory routines of the SMASH speed reconstruction program computed the impact speeds of 73 km/h (45 mph) for Vehicle #1 and 41 km/h (25 mph) for Vehicle #2 with delta Vs of 63 km/h (39 mph) for Vehicle #1 and 52 km/h (32 mph) for Vehicle #2.

Driver #1 and the right front occupant reportedly had met with friends at a nearby shopping mall prior to the crash. They traveled to a friend's house where they reportedly used an inhalant drug in an activity termed by the police as "huffing". The driver departed his friend's residence and was proceeding southbound when he crossed over the centerline and traveled head-on into Vehicle #2.

Case No. CA95-08  
Scene Schematic



CRASH DEMOGRAPHIC DATA		
Location:	Suburban	
Area/Type:	Residential/rural	
Investigating Police Agency:	Local police department	
Accident Type:	Head-on crash	
Air Bag Vehicle Driver Injury Severity:	Driver #1- AIS-2 (Moderate) RF Occupant - AIS-7 (Injured, unknown severity)	Driver #2- AIS-3 (Serious) RF Occupant- AIS-2 (Moderate)
AMBIENCE		
Viewing Conditions:	No restrictions	
Weather:	Light rain	
Road Surface:	Wet	
HIGHWAY		
Type:	County	
Number Of Lanes:	Four lanes	
Width:	14.8 m (48.4')	
Surface:	Concrete	
Median:	None	
Edge:	12.7 cm (5.0") high barrier curb	
Vertical Alignment:	-0.7 percent southbound	
Horizontal Alignment:	Straight	
Estimated Coefficient Of Friction:	0.75 $\mu$ (dry), 0.50 $\mu$ (wet)	
Traffic Density:	Light	
TRAFFIC CONTROLS		
Signals:	None	
Signs:	None	
Markings:	Solid double yellow center line in good condition, white broken lane lines in good condition, no roadway edge lines	



Speed Limit:	72 km/h (45 mph)	
<b>VEHICLE DESCRIPTION</b>	Vehicle #1	Vehicle #2
Description:	Ford Contour GL	Dodge Intrepid
V.I.N.:	1FALP6531SK (serial # omitted)	1B3HD46T3RF (serial # omitted)
Color:	Blue	Red
Odometer:	10,853 km (6,744 miles)	8,724 km (5,421 miles)
Engine:	2.0 liter, 4 cylinder	3.3 liter, 6 cylinder
Transmission:	Automatic	Automatic
Steering:	Power Steering	Power Steering
Brakes:	Four wheel power assisted disc brakes	Power assisted front wheel disc and rear drum brakes
Padding:	Soft edge steering wheel rim, sunvisor, seats, roof liner, center console, door panels and arm rests.	Soft edge steering wheel rim, sunvisor, seats, roof liner, door panels and arm rests
Active Restraints:	Three point lap and shoulder belts in all four outboard seating positions, lap belt in the second row center seat position.	Three point lap and torso belts in the front and rear outboard seating positions, lap belt in the center front and rear seat positions
Passive Restraints:	Driver side and passenger side air bags that deployed during the crash sequence	Driver side and passenger side air bags that deployed during the crash sequence
Defects:	None	None
Tow Status:	Towed due to damage	Towed due to damage

## VEHICLE DAMAGE

### Vehicle #1

#### Exterior - Vehicle #1

The frontal plane of the 1995 Ford Contour GL struck the frontal plane of the 1995 Dodge Intrepid in a direct head-on impact configuration. Direct contact damage was noted across the entire front bumper surface which measured 125.7 cm (49.5"). Crush values obtained are listed below:

$C_1 = 31.5 \text{ cm (12.4")}$	$C_2 = 47.0 \text{ cm (18.5")}$	$C_3 = 64.0 \text{ cm (25.2")}$
$C_4 = 82.6 \text{ cm (32.5")}$	$C_5 = 83.1 \text{ cm (32.7")}$	$C_6 = 74.7 \text{ cm (29.4")}$

Exterior components damaged in the crash included: the front bumper fascia; bumper reinforcement bar; the grille; the headlight assembly; both front fenders; both front tires and front suspension; windshield; right upper A-pillar; the hood; the right front door; the radiator; and engine.

**CDC:** 52-FDEW-4 (a downward shift value of 40 was added to the 12 o'clock PDOF)

**Repair Cost:** Total Loss

### **Interior - Vehicle #1**

Damage to the interior was associated with occupant contacts, the air bag deployment event, and vehicle component intrusions. The steering wheel rim was deformed forward a distance of 5.1 cm (2.0") along the top rim and 2.5 cm (1.0") forward along the lower rim. The steering column was designed with a slip bracket which was displaced 7.0 cm (2.75"). The steering wheel damage and column movement was attributed to contact by the driver's chest during the crash sequence.

Indentation marks were noted on the driver side knee bolster which were attributed to contact by the driver's knees. The right knee indentation measured 7.6 cm wide by 10.2 cm (4.0") high and was located 22.9 cm (9.0") left of the vehicle centerline. The left knee indentation measured 12.7 cm (5.0") wide by 7.6 cm (3.0") high and was located 46.4 cm (18.5") left of the vehicle centerline.

There were two light colored air bag generant residue deposits along the underside of the left instrument panel located on the eyebrow which were located on both sides of the steering column. These deposits measured 6.4 cm (2.5") wide and extended 8.9 cm (3.5") inward toward the instrument panel gauges. A circumferential linear abraded transfer mark was noted along the center instrument panel area which began 8.3 cm (3.3") left of the vehicle centerline below the environmental control knobs and ended on the eyebrow panel. This transfer mark was attributed to contact by the perimeter stitched seam of the front left air bag as the driver loaded and compressed the air bag during the crash sequence.

There was a fabric abrasion on the radio side panel located left of the air bag abraded transfer mark which was attributed to contact by the driver's right arm. It was located 17.8 cm (7.0") left of the vehicle centerline and 31.8 cm (12.5") down from the top of the instrument panel.

The glove compartment door in Vehicle #1 was deformed inward by the left knee of the right front occupant during the crash sequence. The indentation encompassed an area of 17.0 cm x 22.0 cm (6.7" x 8.7") and was located 25.4 cm (10.0") right of the vehicle centerline. The operating handle for the glove compartment door exhibited blue fabric transfers which was associated with the occupant's pants. The fabric transfer measured 3.8 cm x 3.8 cm (1.5" x 1.5").

The right front manual lap and torso restraint belt in Vehicle #1 showed indications that the right front occupant was using the restraint belt system at the time of the crash. There was a 6.4 cm (2.5") black transfer mark on the torso belt which was attributed to stress contact with the D-ring resulting from occupant loading during the crash sequence. The inboard section of the lap belt was comprised of a two belt energy management system attached to the buckle at one end and the floor at the other end. The stitching which joined the two belts was separated along the length of this section as the result of occupant loading during the crash.

The right front seat cushion exhibited two fabric abrasions which were attributed to loading by the passenger's buttocks during the crash sequence. The outboard abraded area measured 9.5 cm (3.8") laterally and 7.6 cm (3.0") longitudinally. It was located 10.2 cm (4.0") rearward from the leading edge of the seat cushion and 3.3 cm (1.3") from the centerline of the seat cushion. The inboard abraded area was less pronounced and measured 7.6 cm (3.0") longitudinally and 2.5 cm (1.0") laterally. This area was located 14.0 cm (5.5") rearward from the leading edge of the seat cushion and 6.4 mm (0.25") from the centerline of the seat cushion.

The driver seat had a similar abraded pattern on the seat cushion as the right front seat cushion. The outboard abraded area measured 6.4 cm (2.5") laterally and 8.3 cm (3.3") longitudinally. It was located 10.2 cm (4.0") rearward from the leading edge of the seat cushion and 3.5 cm (1.4") from the centerline of the seat cushion. The inboard abraded area was less pronounced and measured 11.4 cm (4.5") longitudinally and 6.4 cm (2.5") laterally. This area was located 10.2 cm (4.0") rearward from the leading edge of the seat cushion and 3.8 cm (1.5") from the centerline of the seat cushion.

The front right air bag sustained a tear in the upper right quadrant which measured 12.7 cm (5.0") in length. It was located 43.2 cm (17.0") below the upper air bag seam line with the lower end of the tear located 12.7 cm (5.0") inboard of the right side of the air bag. The tear was the result of snagging during the deployment phase.

There were several intruded areas as the result of the impact with Vehicle #2. The driver side toe pan was intruded 34.9 cm (13.8") longitudinally located at the plastic foot rest mat which was 40.6 cm (16.0") left of the vehicle centerline. The brake pedal was displaced rearward 19.8 cm (7.8"). The toe pan on the passenger side of the vehicle located 30.5 cm (12.0") right of the centerline was intruded longitudinally 55.9 cm (22.0"). The right upper corner of the instrument panel was displaced 19.1 cm (7.5") longitudinally. The rear seat back support was displaced forward from cargo shift during the crash. The left rear seat back support was displaced 16.5 cm (6.5"), the center rear was displaced 15.2 cm (6.0"), and the right rear seat back support was displaced 8.9 cm (3.5").

## **Vehicle #2**

### **Exterior - Vehicle #2**

The frontal plane of the 1994 Dodge Intrepid struck the frontal plane of the 1995 Dodge Intrepid in a direct head-on impact configuration. Direct contact damage was noted across the entire front bumper surface which measured 132.1 cm (52.0"). Crush values obtained are listed below:

$C_1 = 45.7 \text{ cm (18.0")}$	$C_2 = 63.8 \text{ cm (25.1")}$	$C_3 = 55.6 \text{ cm (21.9")}$
$C_4 = 55.3 \text{ cm (21.8")}$	$C_5 = 60.3 \text{ cm (23.8")}$	$C_6 = 67.3 \text{ cm (26.5")}$

Exterior components damaged in the crash included: the front bumper fascia; bumper reinforcement bar; the grille; the headlight assembly; both front fenders; both front tires and front suspension; windshield; the hood; the radiator; and engine.

**CDC:** 52-FDEW-3 (a downward shift value of 40 was added to the 12 o'clock PDOF)

**Repair Cost:** Total Loss

### **Interior - Vehicle #2**

Damage to the interior was associated with occupant contacts, the air bag deployment event, and vehicle component intrusions. There was no deformation of the steering wheel rim even though the steering column was displaced forward by driver loading. The displacement measured at the shear capsules was 9.5 mm (0.375") at the left shear capsule and 25.4 mm (1.0") at the right shear capsule.

The front left air bag exhibited a light reddish color cosmetic transfer (i.e., lipstick) which was attributed to contact by driver's facial area. This transfer measured 4.4 cm (1.75 ") in length and 1.9 cm (0.75") in width. The transfer was located within the stitched center area of the air bag in the lower left quadrant. The angle of the transfer mark indicated the steering wheel was rotated clockwise approximately 40 degrees at the time of the impact. The clockwise rotation of the steering wheel was consistent with the driver's attempt to avoid the crash by steering to the right just prior to impact.

The three point manual lap and shoulder belt was worn correctly by the driver at the time of the crash. A 4.4 cm (1.75") black transfer mark was noted along the upper surface of the torso belt which was attributed to friction of the belt against the D-ring during the crash. A 4.4 cm (1.75") blue fabric artifact had the appearance of being woven into the webbing of the torso belt. This artifact was attributed to contact with the driver's clothing during the crash sequence.

An indentation mark and 6.4 cm (2.5 cm ) long crack noted on the driver side knee bolster were attributed to contact by the driver's left knee and lower leg. Additionally, a reddish colored fabric transfer which measured 3.8 cm (1.5") laterally and 8.9 cm (3.5") vertically was located 45.7 cm (18.0") left of the vehicle centerline and 10.2 cm (4.0") above the bottom edge of the knee bolster was attributed to contact by the driver's left knee. A white colored transfer on the knee bolster adjacent to the right side of the steering column was attributed to contact by the driver's right knee. This contact measured 1.9 cm (0.75") in length and was located 25.4 cm (10.0") left of the vehicle centerline.

The right side of the brake pedal was deformed forward as the result of loading by the driver's right foot during the crash sequence. The driver sustained an open fracture of the right calcaneus which was attributed to this contact mechanism.

The vehicle interior sustained intrusions which involved the toe pan, seat back support, and instrument panel. The toe pan on the driver side adjacent to the foot rest pad was displaced rearward 19.6 cm (7.7") while the toe pan adjacent to the right side of the center console was displaced 27.9 cm (11.0"). The front seat back supports were displaced forward an estimated 15.2 cm (6.0") for the driver side and 27.9 cm (11.0") for the right front. This displacement was attributed to loading by the respective unrestrained rear seat occupants. The center instrument panel along the lower edge adjacent to the center console was displaced rearward 3.5 cm (1.4").

The right front manual lap and torso restraint belt was worn by the right front occupant, a 13 year old male, at the time of the crash. There was a 15.2 cm (6.0") white tissue transfer on the torso belt which began 66.0 cm (26.0") from latch plate. This was attributed to contact by the left side of the right front occupant's neck/shoulder area.

The glove compartment door exhibited a heavy transfer and indentation which were attributed to contact by the knees of the right front occupant. The heavy transfer mark measured 10.2 cm (4.0") laterally and was located on the inboard surface of the glove compartment door, 10.2 cm (3.0") above the bottom edge of the instrument panel. This was attributed to contact by the boy's left knee. The indentation which measured 5.1 cm (2.0") laterally was located along the outboard area of the glove compartment door and 14.0 cm (5.5") above the bottom edge of the instrument panel. This attributed to contact by the right knee of the right front occupant during the crash.

The front right air bag exhibited several deposits of bodily fluid which were attributed to contact by the right front occupant after the crash sequence. He sustained a nose bleed during the crash which was transferred to the air bag. The back side of the air bag had several black vertically striated transfers which were attributed to contact with underside of the air bag module cover during the deployment sequence. There was no other damage noted to the air bag or air bag module cover.

The rear surface of the left front seat back support was deformed as the result of contact by the unrestrained 7 year old female left rear occupant. The top inboard rear portion of the head restraint was loaded by the left rear occupant as noted by a 12.7 cm x 7.6 cm (5.0" x 3.0") reddish brown transfer. As the top of the head restraint was displaced forward, the upper portion of the head restraint guide posts pivoted against the top of the seat back support resulting in the rearward movement of the lower portion of the guide posts. The combination of the head restraint rotation and subsequent contact by the child's upper body resulted in the protrusion of the head restraint guide posts through the seat fabric. The punctures in the seat back support were located 10.8 cm (4.25") below the top of the seat back support.

The front surface of the head restraint exhibited a 5.1 cm (2.0") diameter bodily fluid transfer which was attributed to the driver's head. It was located 6.4 cm (2.5") below the top of the head restraint and 5.1 cm (2.0") left of the inboard edge. Directly below the head restraint on the front surface of the seat back support was another bodily fluid artifact which was also associated with the lesion from the posterior aspect of the driver's head. This artifact was located 3.8 cm (1.5") below the top of the seat back support and 18.4 cm (7.25") left of the inboard seat back support edge.

The fabric on the back of the right front seat back support exhibited two linear abrasion marks which were attributed to contact by the unrestrained right rear occupant during the crash sequence. The left mark measured 2.5 cm (1.0") in length as was located 17.8 cm (7.0") below the top of the seat back support and 10.2 cm (4.0") left of the seat centerline. The second mark measured 1.3 cm (0.5") in length and was located 3.8 cm (1.5") below the top of the seat back support and originated at the centerline of the seat back support.

## **SUPPLEMENTAL RESTRAINT SYSTEM (SRS)**

Both vehicles were equipped with dual front air bag systems which deployed during the crash. Given the longitudinal delta V values of 63 km/h (39 mph) for Vehicle #1 and 52 km/h (32 mph) for Vehicle #2, the effectiveness of the SRS was readily apparent in mitigating life threatening injuries to the front seat occupants.

### **Vehicle #1**

The front left air bag in the Ford Contour (Vehicle #1) was designed with four tethers and two vent ports. The vent ports measured 3.8 cm (1.5") in diameter and were located 6.4 cm (2.5") apart at the top rear surface of the air bag. There was a 11.4 cm (4.5") long grease mark in the lower left quadrant of the air bag which attributed to post crash contact. The front surface of the air bag was constructed of a heavier rip stop gray weave fabric while the back surface was made of fine nylon mesh fabric. The diameter of the air bag measured 57.2 cm (22.5") and the diameter of the center stitched area measured 17.1 cm (6.75"). There was no contact evidence or damage noted to the air bag.

The front left air bag module cover opened in an "H" pattern with no contact damage noted to the flaps. Both flaps measured 10.8 cm (4.25") vertically and 19.1 cm (7.5") laterally. The thickness of the flaps measured 4.8 mm (0.19"). An SRS identification tag was located along the left side plate of the air bag module which read:



The front right air bag was nontethered and had a 3.8 cm (1.5") diameter vent port located along the upper inboard side of the air bag. The air bag measured 71.1 cm (28.0") laterally and 58.47 cm (23.0") longitudinally. There was a 12.7 cm (5.0") linear tear of the air bag fabric in the upper outboard quadrant of the air bag. It was located 43.2 cm (17.0") below the upper air bag seam line. The tear was attributed to snagging along the side structure of the air bag module cavity during the deployment sequence. There was no contact evidence noted to the surface of the air bag. The module cover was one piece where it rotated upward during the SRS deployment sequence. It measured 24.1 cm (9.5") vertically and 45.2 cm (17.8") laterally. There was no contact damage noted to the surface of the cover.

## Vehicle #2

The front left air bag in the Dodge Intrepid (Vehicle #2) was designed with two tethers and no vent ports. The front surface of the air bag was constructed of a heavier rip stop gray weave fabric while the back surface was made of fine nylon mesh fabric. The air bag measured 65.5 cm (25.75") in diameter with a 16.5 cm (6.5") stitched center area. The air bag identification number was as follows:



The front left air bag exhibited a light reddish color cosmetic transfer (i.e., lipstick) which was attributed to contact by driver's facial area. This transfer measured 4.4 cm (1.75 ") in length and 1.9 cm (0.75") in width. The transfer was located within the stitched center area of the air bag in the lower left quadrant. The angle of the transfer mark indicated the steering wheel was rotated clockwise approximately 40 degrees at the time of the impact. The clockwise rotation of the steering wheel was consistent with the driver's attempt to avoid the crash by steering to the right just prior to impact.

The front left air bag module cover opened in an "H" pattern with no contact damage noted to the flaps. The upper flap measured 7.0 cm (2.75") vertically and the lower flap measured 8.3 cm (3.25") vertically. The common lateral tear seam edge between the upper and lower flap measured 16.5 cm (6.5") laterally.

The front right air bag was manufactured with one tether which was attached to the lower portion of the air bag and laterally spanned the face of the air bag. It was located 45.7 cm (18.0") below the inflator unit. There were no visible vent ports in the air bag. The air bag measured 53.3 cm (21.0") laterally and 68.6 cm (27.0") longitudinally.

The front right air bag exhibited several deposits of bodily fluid which were attributed to contact by the right front occupant after the crash sequence. He sustained a nose bleed during the crash which was transferred to the air bag. The back side of the air bag exhibited several black vertically oriented striated transfers which were attributed to contact with underside of the air bag module cover during the deployment sequence. There was no other damage noted to the air bag or air bag module cover.

The front right module cover was a one piece design which rotated upward during the SRS deployment sequence. It measured 14.6 cm (5.75") vertically and 34.9 cm (13.75") laterally. There was no contact damage noted to the surface of the cover. The cover thickness measured 11.1 mm (0.44").

## VEHICLE VELOCITY ESTIMATES

The damage and trajectory routines of the SMASH speed reconstruction algorithm were utilized to compute the impact speed and delta V for both vehicles. The output values are shown in the following table:

	<b>Vehicle #1</b>	<b>Vehicle #2</b>
<b>Impact Speed</b>	73 km/h (45 mph)	41 km/h (25 mph)
<b>Total delta V</b>	63 km/h (39 mph)	52 km/h (32 mph)
<b>Longitudinal delta V</b>	-63 km/h (-39 mph)	-52 km/h (-32 mph)
<b>Lateral delta V</b>	0 km/h (0 mph)	0 km/h (0 mph)
<b>Energy Dissipation</b>	208,798 joules (153,981 ft/lb)	177,525 joules (130,918 ft/lb)

## **COLLISION SEQUENCE**

### **Pre-Crash**

Driver #1 and the right front occupant reportedly had met with friends at a nearby shopping mall prior to the crash. They traveled to a friend's house where they reportedly used an inhalant drug in an activity termed by the police as "huffing". The driver departed his friend's residence and was proceeding southbound when he crossed over the centerline and traveled in the left northbound travel lane. The SMASH speed reconstruction algorithm computed his impact speed at 73 km/h (45 mph).

Driver #2 was returning home from religious education classes with her three children. The driver and the right front occupant, her thirteen year old son, were restrained by their respective three point lap and shoulder belt systems while the 7 year old and 11 year old rear seat occupants were unrestrained. The driver indicated that her children were sitting against their seat back supports in a relaxed and calm manner prior to the crash.

Vehicle #2 was traveling northbound in the left lane at a driver estimated speed of 72 km/h (45 mph) when she noticed the approach of Vehicle #1 in her travel lane. At first glance, Driver #2 interpreted Vehicle #1's movement as traveling in the center of the roadway in the designated turn lane (i.e., one lane, two way, channelization). However, she knew that there were no driveways or intersections for Driver #1 to enter along that section of roadway. Given the vehicle closure rate of 145 km/h (90 mph), Driver #2 suddenly realized that Vehicle #1 was traveling head-on in her lane. She applied full braking and attempted to steer to the right.

From the evidence at the scene and damage to Vehicle #1, it appeared that Driver #1 entered the on-coming lane and was traveling straight toward Vehicle #2 prior to the crash. There was no indication that Driver #1 applied the brakes or attempted an evasive steering maneuver prior to the impact.

### **Crash**

Vehicle #1 struck the front of Vehicle #2 in a head-on, 100 percent overlap contact pattern at a SMASH computed impact speed of 73 km/h (45 mph). Vehicle #2's impact speed was computed



at 41 km/h (25 mph). This resulted in delta V values of 63 km/h (39 mph) for Vehicle #1 and 52 km/h (32 mph) for Vehicle #2.

## **Post Crash**

**Final Rest** - Vehicle #1 came to the final rest position (FRP) in the left northbound lane rotated 22 degrees counterclockwise from its at impact heading angle. It traveled forward 1.3 m (4.3') from the point of impact (POI) to the final rest position (FRP). Vehicle #2 also came to the FRP in the left northbound lane rotated 50 degrees clockwise. It was pushed rearward 2 m (6.6') from the POI to the FRP.

**Driver Activities** - Driver #2 was removed from vehicle by rescue as well as the left rear and right rear occupants in Vehicle #2. The right front occupant in Vehicle #2 was helped out of the vehicle by bystanders and placed on the adjacent grass shoulder area. The right front occupant in Vehicle #1 was removed by rescue. The disposition of Driver #1 was not known.

**Police Activities** - The local police department responded to the crash scene and documented the final rest positions of both vehicles, obtained on-scene photographs, interviewed participants and witnesses to the crash, and controlled the traffic. They impounded both vehicles pending their further review of circumstances relating to the crash and to accommodate this investigation.

**Rescue Activities** - EMS responded and arrived on-scene within 7 minutes of notification. They were at the scene for a period of time which ranged between 13 and 20 minutes before departing for medical treatment facilities. Driver #1, Driver #2, and the right front occupant of Vehicle #2 were transported via ambulance to a local trauma center where the transport time was approximately 15 minutes. The right front occupant of Vehicle #1 and the left rear and right rear occupants of Vehicle #2 were transported to a pediatric unit in a nearby city via ambulance and arrived 97 minutes after the crash.

**Scene Clearance** - Both vehicles were towed from scene due to damage and were secured by police pending the outcome of their investigation and to accommodate this investigation.

## **HUMAN FACTORS/OCCUPANT DATA**

<b>Vehicle #1</b>	<b>Driver</b>	<b>Right Front Occupant</b>
Age/Sex:	16 year old male	17 year old male
Height:	Unknown	Unknown
Weight:	Unknown	65.8 kg (145.0 lb.)
Manual Restraint System Usage:	None	Manual three point lap and torso belt
Usage Source:	Vehicle inspection	Vehicle inspection

<b>Vehicle #1</b>	<b>Driver</b>	<b>Right Front Occupant</b>
Eyewear:	Unknown	Unknown
Vehicle Familiarity:	Driver's Mother's vehicle, not familiar	
Route Familiarity:	Unknown	
Trip Plan:	Unknown	
Type of Medical Treatment:	Treated and released	Admitted

<b>Vehicle #2</b>	<b>Driver</b>	<b>Right Front Occupant</b>	<b>Left Rear Occupant</b>	<b>Right Rear Occupant</b>
Age/Sex:	41 year old female	13 year old male	7 year old female	11 year old female
Height:	167.6 cm (66.0")	167.6 cm (66.0")	124.5 cm (49.0")	165.1 cm (65.0")
Weight:	65.8 kg (145.0 lbs)	49.9 kg (110.0 lbs)	27.2 kg (60.0 lbs)	54.4 kg (120.0 lbs)
Manual Restraint System Usage:	3-point lap and torso belt	3-point lap and torso belt	Not wearing the available 3-point lap and torso belt	Not wearing the available 3-point lap and torso belt
Usage Source:	Vehicle inspection, police accident report, interview	Vehicle inspection, police accident report, interview	Vehicle inspection, police accident report, interview	Vehicle inspection, police accident report, interview
Eyewear:	Prescription glasses which were fractured during the crash	Prescription glasses which were deformed during the crash	None	None
Vehicle Familiarity:	Very familiar			
Route Familiarity:	Driver was very familiar with the roadway, traveled daily			

Trip Plan:	Returning home from religious studies where the children attended classes and the driver participated as an assistant instructor.			
Type of Medical Treatment:	Admitted	Admitted	Admitted	Admitted

**INJURY DATA**

Driver #1 was transported to a local trauma unit while the right front occupant was transported to a pediatric unit located in a nearby city. Driver #1 was treated and released while the right front occupant was admitted. The driver and right front occupant in Vehicle #2 were transported to a local trauma unit while the two rear seat occupants were transported via ambulance to a pediatric unit located in a nearby city. Driver #2 was admitted and discharged 21 days after the crash. The 13 year old right front occupant in Vehicle #2 was observed overnight and released the next day. The 7 year old left rear occupant was admitted for 19 days and subsequently discharged to a rehabilitation center. The 11 year old right rear occupant was admitted and discharged 9 days after the crash.

VEHICLE #1	AIS-90 INJURY	INJURY SOURCE
<b>Driver #1</b> 1. Fracture of foot (not specified)	852000.29	Floor/ toe pan
<b>Right Front Occupant</b> 1. Fracture of neck, observed with a halo	Not codeable	Non contact injury source, flexion

VEHICLE #2 - DRIVER	AIS-90 INJURY	INJURY SOURCE
1. 3 cm transverse laceration of the occipital scalp	190600.16	Left rear occupant
2. Abrasion of the inner upper lip	290202.18	Front left air bag
3. Multiple right rib fractures, fifth, sixth, seventh, eighth, and ninth, right pneumothorax	450230.31	Torso restraint belt
4. Right pulmonary contusion, right lung base	441406.31	Torso restraint belt
5. Contusion of left upper chest	490402.12	Torso restraint belt
6. Abrasions across the chest	490002.10	Torso restraint belt
7. Contusion of left superior iliac crest region	850602.12	Lap belt

<b>VEHICLE #2 - DRIVER</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
8. Grade II open comminuted fracture of the right calcaneus (8 cm laceration across the medial aspect just below the medial malleolus showing bone protruding through)	851400.21	Brake pedal/ toe pan
9. Open fracture of the right talus	852200.21	Brake pedal
10-13. Fracture of the left 2-5 metatarsal, fracture dislocation of the left third fourth and fifth tarsal metatarsal joints with fractures of the second and third metatarsal heads	852200.22 852200.22 852200.22 852200.22	Toe pan
<i>Supplemental discussion:</i> Divergent comminuted Lisfranc fracture of the left foot and second metatarsal head fracture (Left foot frank fracture, x-ray reveals a highly come divergent type Lisfranc injury.)		

<b>VEHICLE #2 - RIGHT FRONT OCCUPANT</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
1. Contusion of the head (No brain injury)	190402.19	Right rear occupant
2. Deformed nose/bleeding	Not codeable	Front right air bag
3-4. Contusions of both superior iliac crests	850602.11 850602.12	Lap restraint belt
5. Abrasions on hips	890202.13	Lap restraint belt
6. Acute fracture of the mid shaft of the left clavicle with overlapping of fracture fragments, deformity of shoulder	752200.22	Right rear occupant
7. Inferiorly displaced scapula	Not codeable	Right rear occupant
8. Pain of left elbow region	Not codeable	Unknown
9. Pain of the left fifth finger	Not codeable	Unknown

<b>VEHICLE #2 - RIGHT FRONT OCCUPANT</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
10. Abrasion of right foot area	890202.11	Lower right instrument panel
11. Bruise of right knee	890402.11	Knee bolster/ glove compartment box

<b>VEHICLE #2 - LEFT REAR OCCUPANT</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
1. Unconscious and unresponsive to painful stimuli, coma level IV	160824.50	Driver
2. Large laceration of the scalp which extended across the midline with exposed skull and obvious fracture	190604.15	Driver
3. Multiple skull fractures	150406.41 150406.42	Driver
<p><i>Supplemental discussion:</i> CT scan indicated the skull fracture extending bilaterally (bi-parietally with more extensively down the right side). As it crosses the sagittal suture, that suture is diastatic (that was widely diastatic but only minimally depressed). Five fragments removed ranging from 3.9 cm x 0.6 cm x 0.4 cm to 7.5 cm x 5.0 cm x 0.4 cm, and in aggregate 11.0 cm x 8.0 cm x 0.4 cm. Brain matter in the laceration and subgaleal space. Multiple small right intracranial hemorrhages. Positive midline shift. Cisterns open. Ventricles are small. Laceration of the dura and the cerebral tissue directly below the fracture suggesting the fracture edge had initially been pushed into the brain tissue</p>		
4. Hematoma in the right parietal lobe consistent with the laceration of the dura	140629.41	Driver
5-7. Diffuse punctate contusions throughout both hemispheres, basal ganglia and brain stem	140602.31 140602.32 140204.58	Driver
8. Small right parietal subdural hematoma measuring 7 mm in thickness	140652.41	Driver
9. Tooth missing in the lower bridge of teeth (chest x-ray noted a tooth in the carina)	251499.18	Left front seat head restraint
10. Several broken teeth	251404.18	Left front seat head restraint

<b>VEHICLE #2 - LEFT REAR OCCUPANT</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
11. Piece of glass embedded in the center of the left cornea	Not codeable	Unknown
12. Horizontal abrasion across the middle of the right cornea	240602.11	Left front seat head restraint
13. Left pneumothorax	442202.32	Driver seat back support
14. Right lung collapsed	Not codeable	Driver seat back support

<b>VEHICLE #2 - RIGHT REAR OCCUPANT</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
1. Depression of the left parietal frontal region measuring an area of 10 x 12 cm	150404.32	Right front occupant
2. Fractures of the right frontal sinus	250800.21	Right front occupant
3-4. Fractures of the lateral, superior wall, and medial wall of the orbits bilaterally. On the right, small fragments of bone are displaced toward the medial rectus muscle	251200.21 251200.22	Right front occupant
5. Contusion of the left front scalp	190402.12	Right front occupant
6. Abrasion of left side of head	190202.12	Right front occupant
7. Small contusions of the left posterior temporal lobe and the left frontal lobe, contusions of the bilateral inferior frontal lobes	140620.33	Right front occupant
8-11. Superficial lacerations and abrasions of the left side of the forehead, abrasions of left side of face Laceration of the left lateral canthal angle (adjacent to eye, eyelid)	290602.17 290202.17 290202.12 290602.12	Right front occupant
12. Abrasion of the left eye lid	29720.12	Right front occupant
13. Large hematoma of the left face and scalp	290402.12	Right front occupant

<b>VEHICLE #2 - RIGHT REAR OCCUPANT</b>	<b>AIS-90 INJURY</b>	<b>INJURY SOURCE</b>
14. Closed basilar skull fracture raccoon eyes, left greater than right and fracture of the cribriform plate	150200.38	Right front occupant
15. Left pneumothorax, small bilateral areas of pulmonary contusions, located in the right upper lobe and the left mid lung with lesser in the right lower lobe disease. Heart size pulmonary contusion, no rib fractures	441410.43	Front seat back support
16. Small contusion of the left upper arm and left shoulder	790402.12	Front seat back support
17. Abrasions of the left shoulder	790202.12	Front seat back support
18. Minimally 1 mm displaced fracture of the right medial malleolar with probable Salter-Harris I fracture of the lateral malleolar fracture	851610.21	Front seat back support
19. Abrasions of the right foot	890202.11	Front seat cushion
20. Bruising of the right foot	890402.11	Front seat cushion
21. Excoriation over the left anterior ankle area	890202.12	Front seat cushion

## **OCCUPANT KINEMATICS**

### **Vehicle #1**

#### **Driver #1**

The 16 year old male unrestrained driver of Vehicle #1 had been using an inhalant prior to crash. He swerved into the oncoming lane and struck Vehicle #2 in a 100 percent overlapping head-on impact configuration. During the impact sequence, the driver moved forward in response to impact forces and contacted the deployed air bag with his upper body and the knee bolster with his knees. Abraded sections of the anti-submarining designed seat cushion fabric indicated that his buttocks slid along the fabric seat cushion while his knees were loading and deforming the knee bolster.

buttocks slid along the fabric seat cushion while his knees were loading and deforming the knee bolster.

His upper body continued to move forward and compressed the front left air bag. This was apparent from the circumferential transfer pattern located on the instrument panel. He then loaded the steering wheel assembly with his upper torso which resulted in the deformation of both the upper and lower portions of the steering wheel rim and the forward displacement of the steering column. His feet were in contact with the toe pan as it was intruding into the occupant compartment which resulted in a reported fracture of the foot.

He rebounded rearward into the seat where he came to final rest. He was removed by rescue and transported to a trauma unit where he was treated and released. She came to rest in the driver seat.

### **Right Front Occupant - Vehicle #1**

The 17 year old male right front occupant was restrained by the manual three point lap and shoulder belt at the time of the crash as evidenced by the separated stitching in the belt force limiter and contact evidence on the torso belt. His knees loaded the intruding knee bolster/glove compartment door resulting in pronounced deformation. His buttocks slid along the anti-submarining designed seat cushion resulting in two distinctive abraded areas on the fabric seat cushion. His upper torso continued to move forward and contacted the deployed front right air bag. Although his neck injury was not medically substantiated, the alleged fracture of the neck was attributed to flexion action resulting from the upper torso being restrained by the torso belt.

He rebounded rearward where he came to final rest in the seat. He was removed by rescue and transported via ambulance to a pediatric unit in a nearby city where he was admitted for treatment.

### **Driver #2**

Driver #2, a 41 year old female who was restrained by the three point manual lap and torso belt, was braking with her right foot when the front of her vehicle was struck by the frontal plane of fender of Vehicle #1. Driver #2 moved forward and loaded the restraint belt system resulting in a contusion of the upper left shoulder area, abrasions across the chest, multiple rib fractures on the right side and contusions of the hips. Her face then contacted the inflated front left air bag as noted by a lipstick transfer on the face of the air bag. She continued forward and compressed the air bag with her upper torso and loaded the steering column as noted by the displacement of the steering column shear plate.

Driver #2's lower torso moved forward with her knees contacting and deforming the knee bolster. Her right foot loaded the brake pedal resulting in the forward displacement of the pedal and an Grade II open comminuted fracture of the right calcaneus. Her left foot was position against the toe pan and sustained numerous fractures of the of the metatarsal bones as her lower leg loaded the toe pan while the toe pan was intruding into the occupant compartment during the impact.



During the Driver #2's contact sequence with the front left air bag and steering wheel assembly, the unrestrained 7 year old female in the left rear seat moved forward over the left front seat back support and struck the posterior aspect of the driver's head with her head. This contact resulted in a 3.0 cm (1.2") laceration of the driver's posterior scalp. As the driver rebounded rearward against the seat back support, bodily fluid emitted from her head lesion was deposited on the head restraint and upper portion of the seat back support.

#### **Right Front Occupant - Vehicle #2**

The right front occupant, the 13 year son of the driver, moved forward during the pre-impact braking and was restrained by the three point manual lap and shoulder belt. During the crash sequence, the boy loaded the belt restraint system as noted by the tissue transfer on the torso belt and related contusions and abrasions of the hips attributed to the lap belt.

His upper body then contacted the deployed air bag resulting in a deformed nose with bleeding. His lower torso moved forward where his knees contacted the glove compartment door as noted by an abrasion mark and an indentation.

While in contact with the air bag, the boy's left shoulder was contacted by the unrestrained 11 year old female right rear occupant who moved forward over the top of the seat back support in response to the impact forces. This contact resulted in the fracture of the boy's left clavicle. The boy rebounded back against the seat back support and slumped forward as noted by the bodily fluid deposits on the front surface of the front right air bag. He was subsequently assisted from the vehicle by a passerby to a grass area adjacent to the roadway. He was transported to a local trauma unit via ambulance where he was admitted for observation and discharged the next day.

#### **Left Rear Occupant - Vehicle #2**

The unrestrained 7 year old female left rear occupant was sitting against the seat back support prior to the crash. During pre-impact braking and subsequent impact, the girl moved forward in response to vehicle braking and contacted the left front seat back support with her chest area and head restraint with her facial area. This resulted in the displacement of the seat back rest fabric which was punctured by the headrest height adjustment posts. Several broken teeth and an abrasion of the right cornea were attributed to this contact mechanism.

She continued forward over the top of the head restraint and struck the posterior aspect of the driver's head. The child sustained a large laceration of the scalp, skull fracture, laceration of the dura and cerebral tissue below the fracture, and a subdural hematoma from this contact sequence. She rebounded and came to rest on the floor behind the driver's seat. She was transported to pediatric unit where she arrived unconscious and unresponsive to painful stimuli.

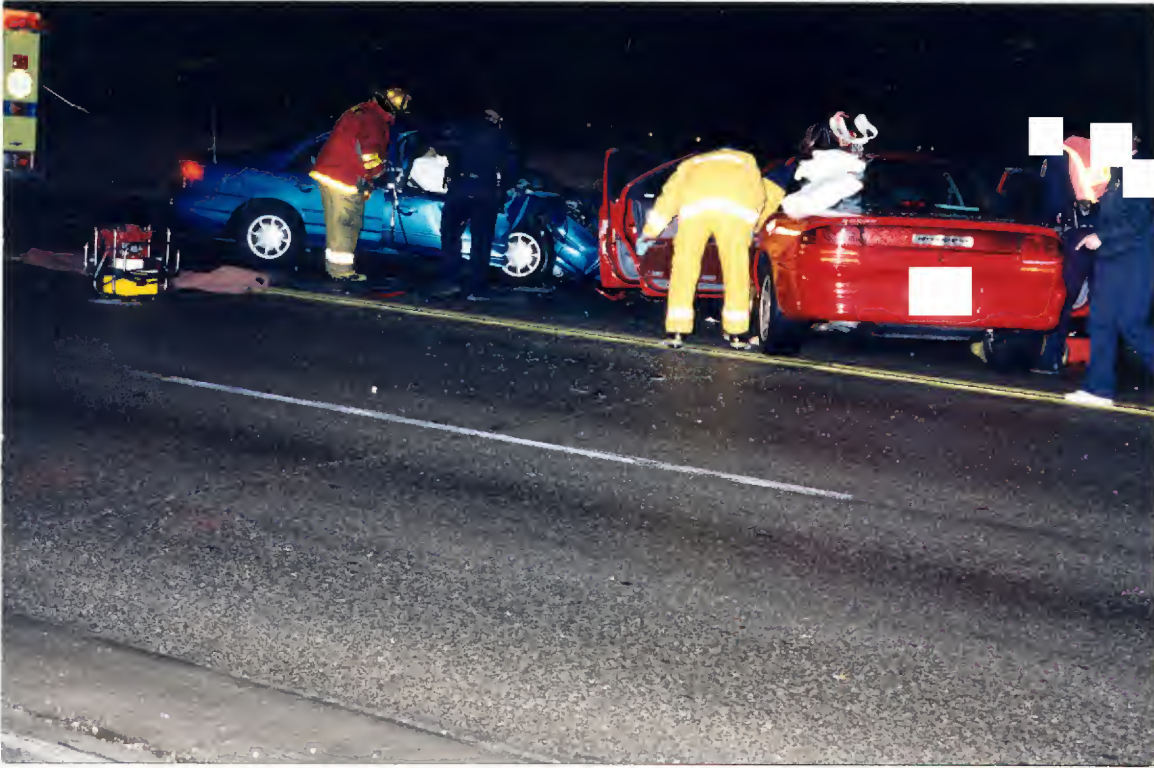
#### **Right Rear Occupant - Vehicle #2**

The unrestrained 11 year old female right rear occupant was sitting against the rear seat back support prior to the crash. During pre-impact braking and the subsequent impact sequence, the girl

moved forward and loaded the back of the right front seat back support with her knees and upper body which resulted in bilateral lung contusions and abrasions and contusions of the left arm and shoulder. She continued forward over the top of the head restraint and struck the right front occupant's left shoulder with her head. This resulted in fracture of skull and contusions of the brain. She rebounded into the rear seat area where she was removed by rescue. She was transported to a pediatric unit in a nearby city where she arrived in an unconscious state.

**APPENDIX A**  
**SELECTED PHOTOGRAPHS**

**SELECTED PRINTS**  
**Calspan Case No. 95-08**



1. On-scene photograph of Vehicle #1 [1995 Ford Contour GL (Blue)] and Vehicle #2 [1994 Dodge Intrepid (Red)] at final rest positions (FRP).



2. View of both vehicles at FRP looking north. Both vehicles came to rest in the left northbound lane.





3. View of the vehicles from the left southbound lane.



4. View of both vehicles at FRP looking west.



5. View of both vehicles at FRP looking east.



6. View of Vehicle #2 at FRP looking north from the left southbound lane.





7. View of Vehicle #1's trajectory 75 m (250') prior to point of impact (POI).



8. View of Vehicle #1's trajectory 60 m (200') prior to point of impact (POI).



9. View of Vehicle #1's trajectory 45 m (150') prior to POI.



10. View of Vehicle #1's trajectory 30 m (100') prior to POI.





11. View of Vehicle #1's trajectory 15 m (50') prior to POI.



12. View of Vehicle #1's trajectory 25 m (25') prior to POI.



13. View of Vehicle #1's trajectory at POI.



14. Closer view of gouge marks in road surface. The elongated gouge mark along the left side of the photograph is related to Vehicle #1 undercarriage component and the cluster of gouges in the right center of the photograph is related to Vehicle #2 undercarriage components.



15. Close-up view of the gouge mark produced by the undercarriage of Vehicle #1.



16. Close-up view of gouge marks produced by the undercarriage of Vehicle #2 looking south in the direction of Vehicle #1's trajectory.

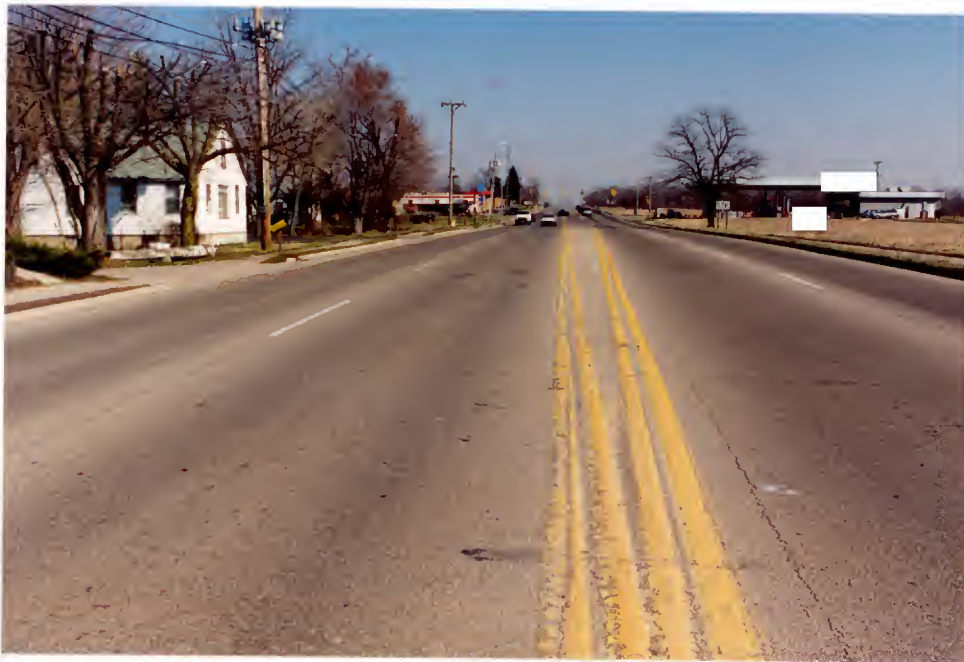




17. Reverse view of Vehicle #1's trajectory from the POI.



18. Reverse view of Vehicle #1's trajectory 15 m (50') from the POI.



19. Reverse view of Vehicle #1's trajectory 30 m (100') from the POI.



20. View of Vehicle #2's trajectory 100 m (300') prior to the POI.

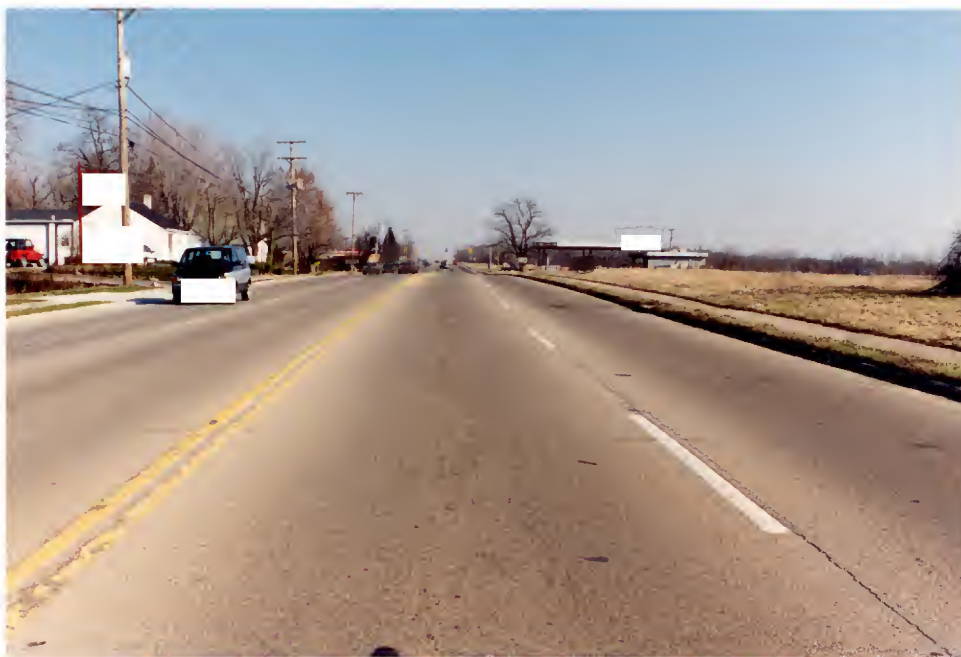




21. View of Vehicle #2's trajectory 75 m (250') prior to the POI.



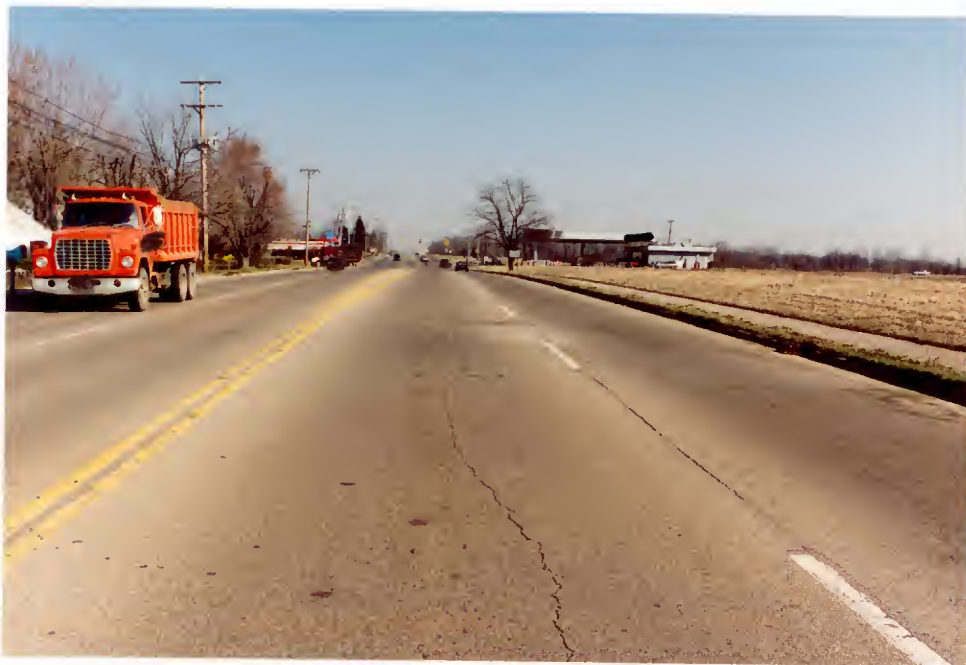
22. View of Vehicle #2's trajectory 60 m (200') prior to the POI.



23. View of Vehicle #2's trajectory 45 m (150') prior to the POI.



24. View of Vehicle #2's trajectory 30 m (100') prior to the POI.



25. View of Vehicle #2's trajectory 15 m (50') prior to the POI.



26. View of Vehicle #2's trajectory 7.5 m (25') prior to the POI.





27. View of Vehicle #2's trajectory at the POI.



28. Closer view of the gouge marks at the POI.



29. Reverse view of Vehicle #2's trajectory from the POI.



30. Reverse view of Vehicle #2's trajectory 45 m (150') from the POI.





31. Frontal view of Vehicle #1 (1995 Ford Contour GL) with the bumper cover removed to show frontal displacement.



32. Frontal view of Vehicle #1 with the bumper cover placed into position.

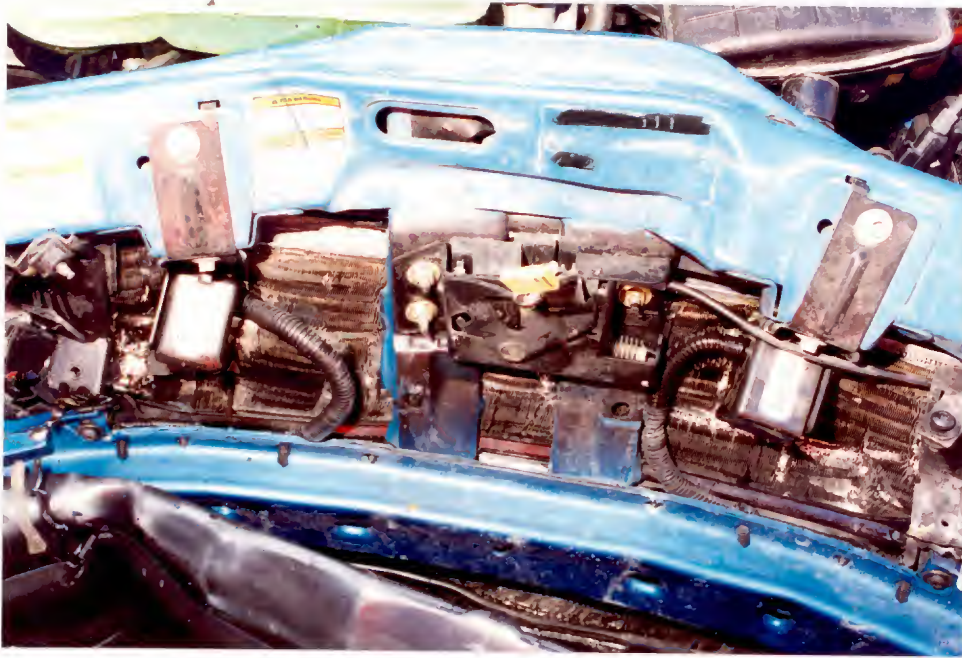


33. View of the front bumper cover illustrating the direct contact pattern.



34. Frontal view of Vehicle #1 with the hood elevated and showing the location of the left and right primary crash front air bag sensors.



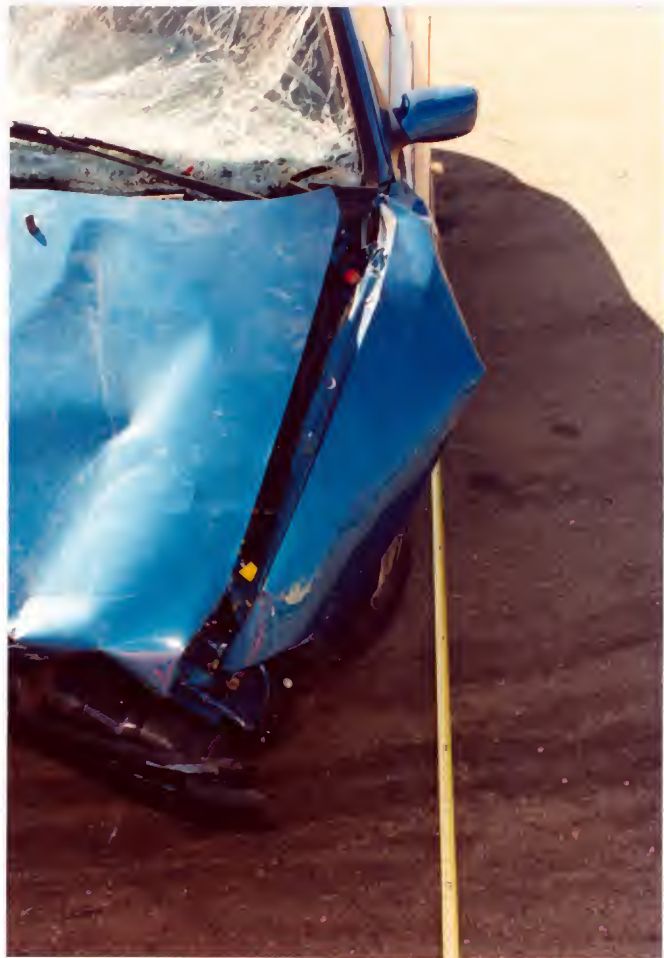


35. Closer view of the left and right primary crash front air bag sensors.



36. Longitudinal view along the right side plane of Vehicle #1 highlighting the minimal lateral movement of the vehicle structure.

37. Longitudinal view along the left side plane of Vehicle #1 highlighting the lack of outward lateral movement of the vehicle structure.



38. Left front corner view of Vehicle #1.

BEST AVAILABLE





39. Lateral view of Vehicle #1 showing the extent of frontal crush.



40. Lateral view from the left side of Vehicle #1 showing the extent of frontal crush.



41. Lateral view from the right side of Vehicle #1 showing the extent of frontal crush.



42. View of Vehicle #1's right side plane.





43. Left rear corner view of Vehicle #1.



44. Longitudinal view from the left rear bumper of Vehicle #1 highlighting the lack of outward lateral movement of the vehicle structure.



45. Right rear corner view of Vehicle #1.



46. Overhead view of Vehicle #1.





47. View of the right side plane of Vehicle #1 with the right front door placed into position.



48. Right front corner view of Vehicle #1 with the absence of the bumper cover and right front door.



49. Same view as the previous photograph with the bumper cover and right front door placed into approximate position.



50. Angular view of Vehicle #1's interior showing occupant contacts to the knee bolster, glove compartment door, and seat cushions.





51. Lateral view of the front seat area of Vehicle #1.



52. Lateral view of the steering wheel rim taken from the left side of the vehicle showing rim displacement and position of the upper flap of the module cover behind the upper rim.



53. Lateral view of the steer wheel rim taken from the right side of the vehicle illustrating rim displacement.

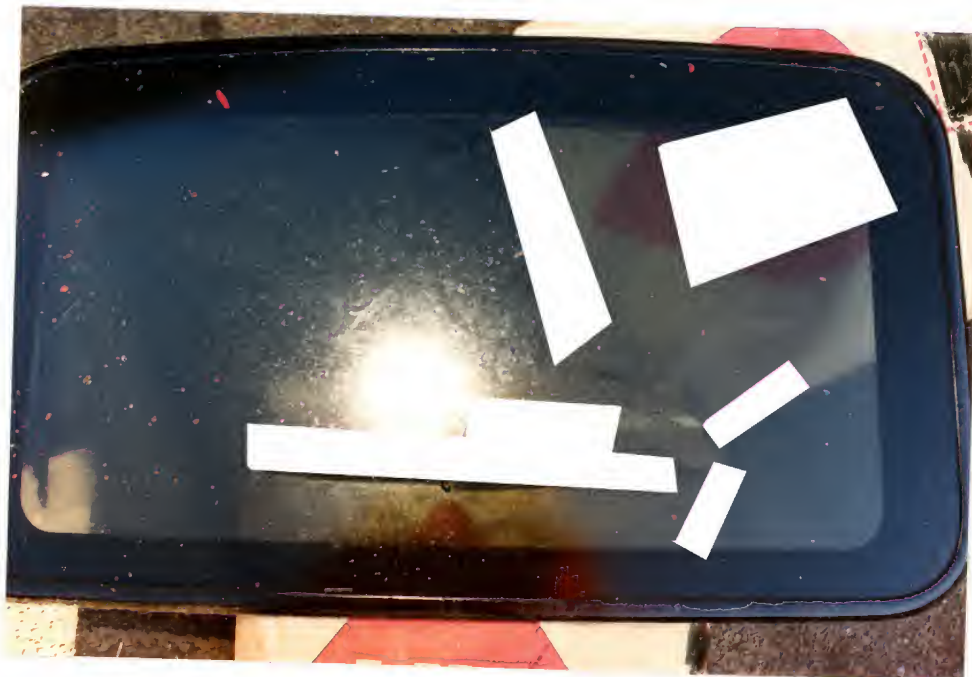


54. Panoramic view of the roof and upper instrument panel showing the sun roof shade panel which was placed back into position.





55. Closer view of the sun roof shade panel looking laterally from right to left.



56. View of the sun roof AS-3 glazing which separated from Vehicle #1 during the crash. Red paint chips matching the color of Vehicle #2 were present on the glazing surface.

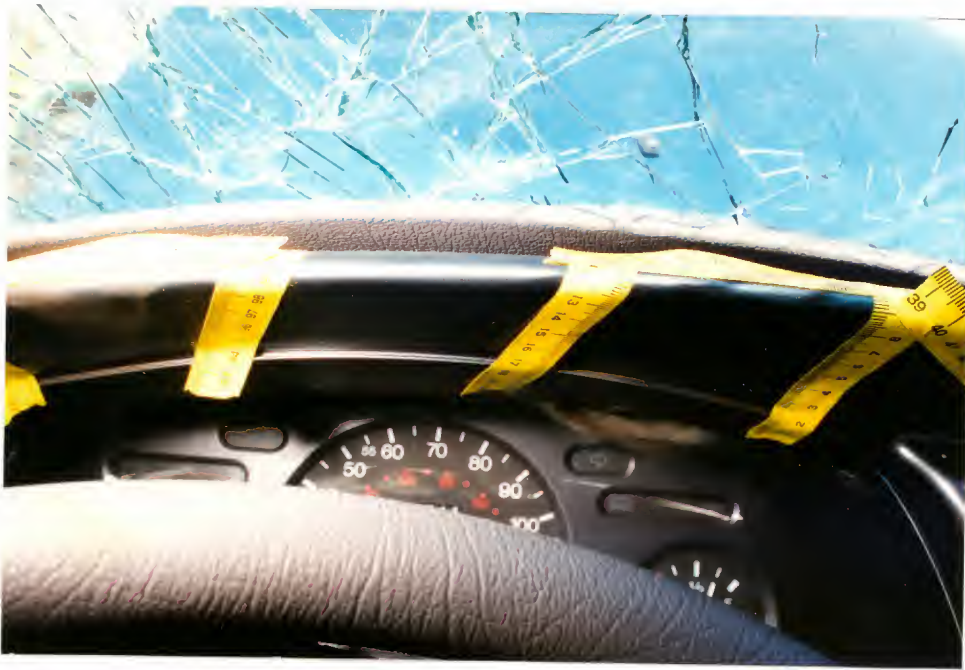


57. Panoramic view of the windshield and instrument panel of Vehicle #1 highlighting occupant contacts.



58. View of the left instrument panel, steering wheel, air bag pushed back into module, and seat cushion abraded fabric.





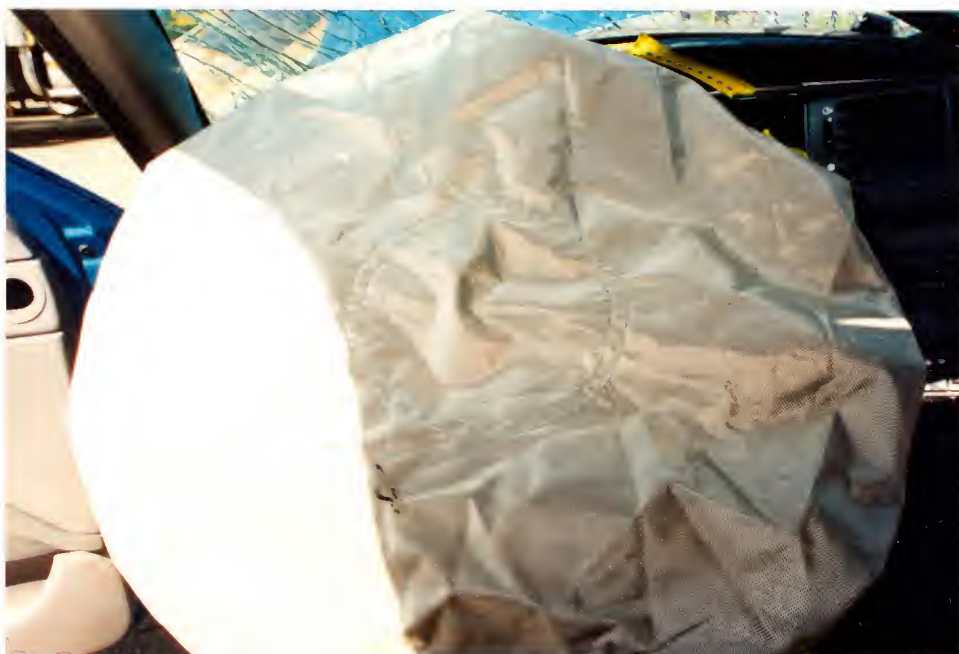
59. Close-up view of generant deposit along the underside of the upper instrument panel which aligned with the location of the top designed air bag vent ports.



60. Close-up view of scratch marks along the underside of the upper instrument panel which extended downward in a curved pattern to the mid instrument panel level. These marks were the result of contact by the peripheral edge of the driver side air bag.



61. An other view of the scratch mark pattern illuminated in the previous photograph.



62. Overall view of the driver side air bag in Vehicle #1.





63. View of the air bag vent ports located on the instrument panel side of the air bag in the 11 o'clock and 1 o'clock position.



64. View of the driver air bag module identification number located along the left side of the air bag module surface.



65. View of the lower flap of the air bag module cover.



66. View of the deformation  
Vehicle #1's knee bolster  
left of the steering  
column.



67. View of a black scuff mark along the bottom edge of the knee bolster left of the steering column.



68. View of the deformation and contact to the knee bolster and lower instrument panel right of the steering column.





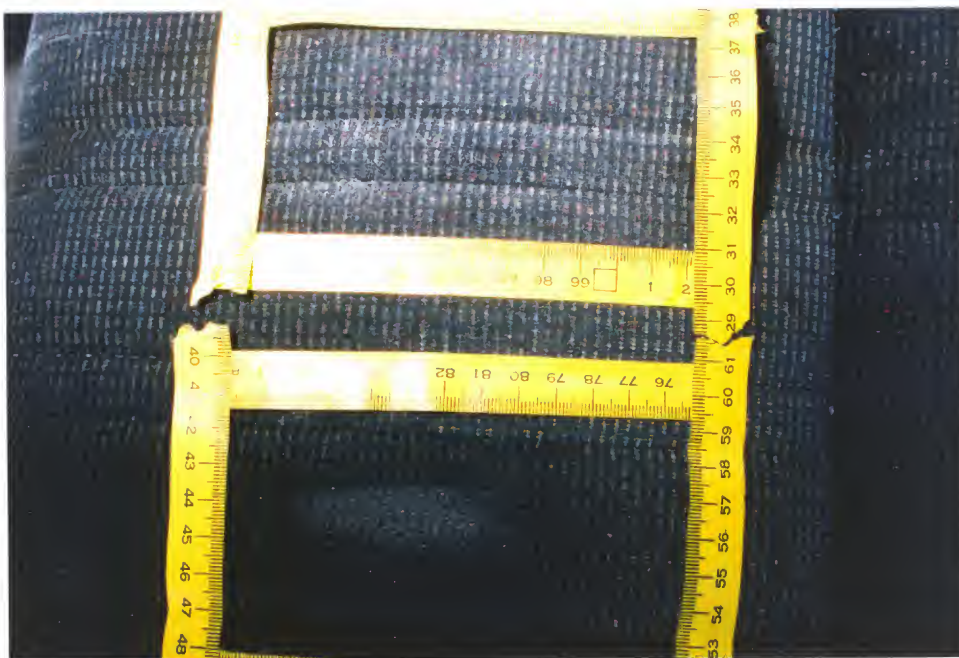
69. View of the steering column slip joint which was displaced 7.0 cm (2.8"). The original placement of the column was located at the spot marked by the No.10 on the calibrated yellow tape. The steering wheel is oriented at the left side of the photograph.



70. View of the lower portion of the steering column highlighting the steering column energy absorbing device (noted by the yellow calibrated in the upper area of the photograph) and the offset convoluted steering column (noted by the yellow calibrated tape in the lower portion of the photograph).



71. View of the abraded fabric on the driver's seat resulting from contact by the driver's left and right upper legs and buttocks.



72. Close-up view of the abraded fabric on the driver's seat.



73. View of the center instrument panel of Vehicle #1.



74. View of the right instrument panel showing right front occupant contacts. The plastic glove compartment door panel is visible in the lower portion of the photograph.

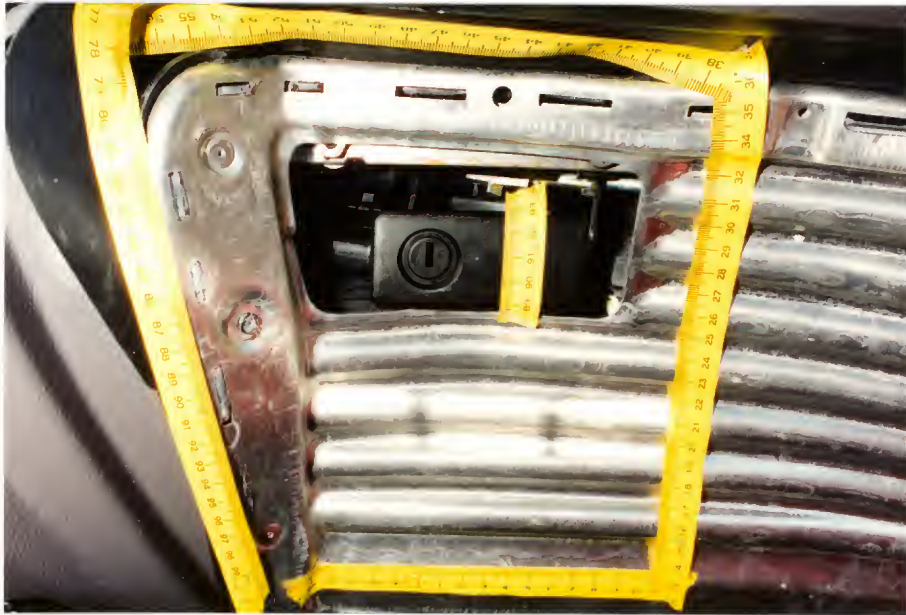


75. View of the plastic glove compartment panel repositioned highlighting the occupant contact pattern.



76. Close-up view of plastic glove compartment panel.





77. Closer view of the deformation to the metallic structure of the glove compartment door and displacement of the glove compartment door latch handle.



78. Close-up view of the latch handle showing a blue material transfer in the lower ring of the locking mechanism.



79. Angular view of the instrument panel taken from the right side of the vehicle with the passenger side air bag tucked into the module.



80. Same view as the previous photograph except with the passenger side air bag fully exposed.





81. View of the passenger side air bag and upper air bag flap.



82. Close-up view of the passenger air bag module cover and attached instrument panel finish panel.



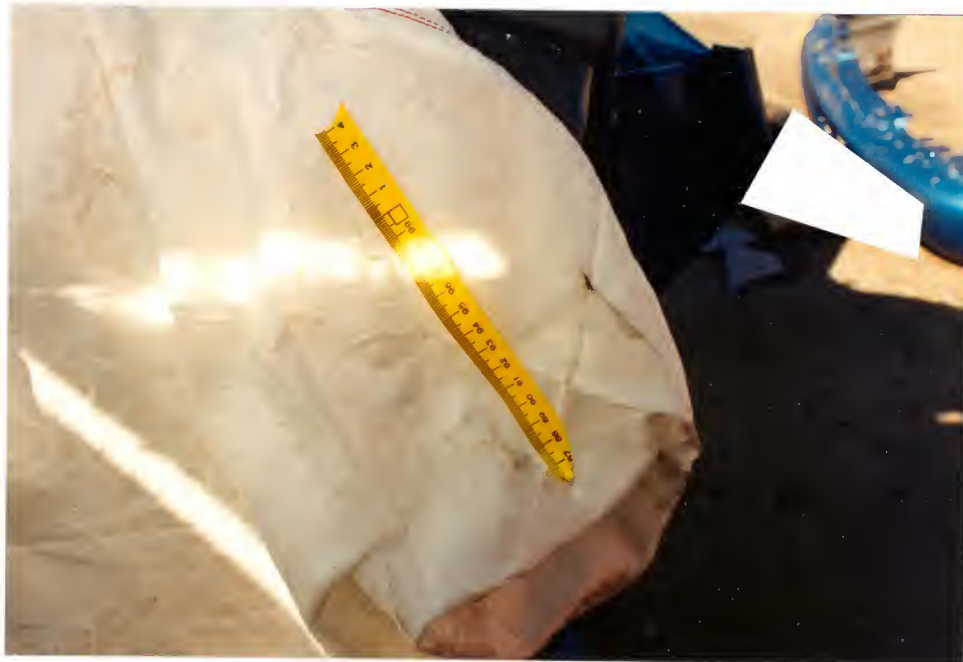
83. View of the leading edge of the instrument panel finish panel.



84. Close-up view of the metallic upper flap of the air bag module showing the date of manufacture.



85. View of the passenger air bag with the single air bag vent port located at the upper left aspect of the air bag.



86. View of passenger air bag highlighting a linear area where the air bag fabric was snagged during deployment.



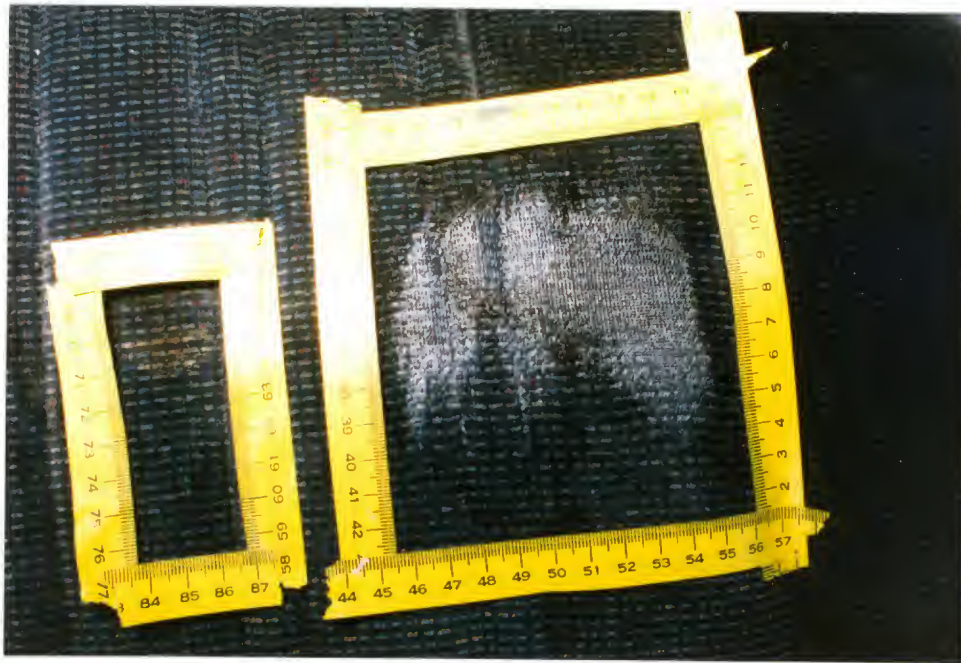


87. Close-up view of the linear snag of the passenger air bag fabric.



88. Lateral view of the front seat area taken from the right side of the vehicle.





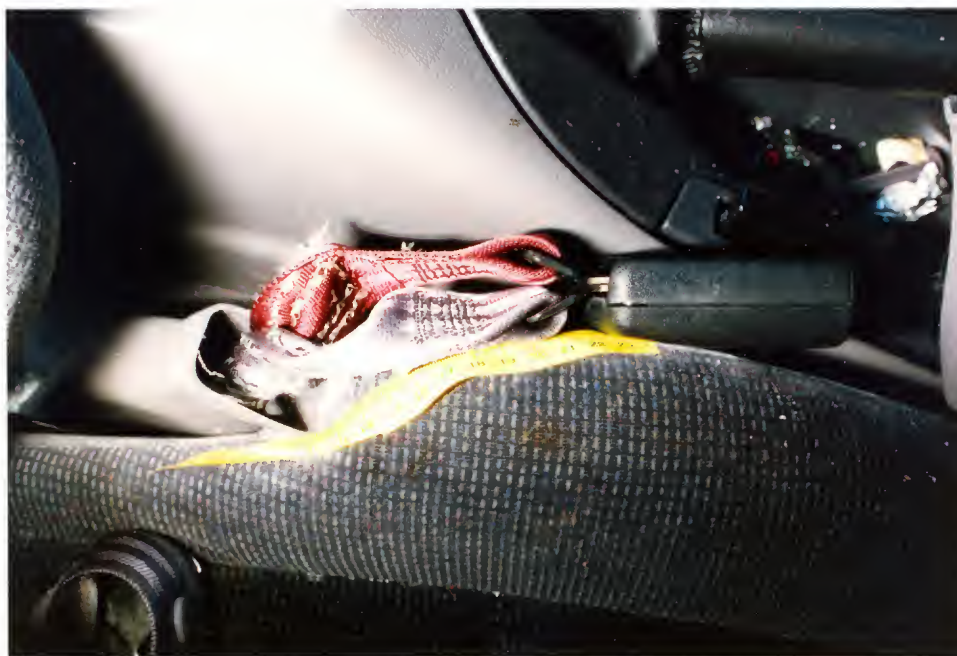
89. View of the abraded fabric on the right front passenger's seat cushion resulting from contact by the right front occupant's right and left upper legs and buttocks. The larger abraded area is associated with the occupant's right side.



90. A lateral view from the right side of the vehicle looking rearward.



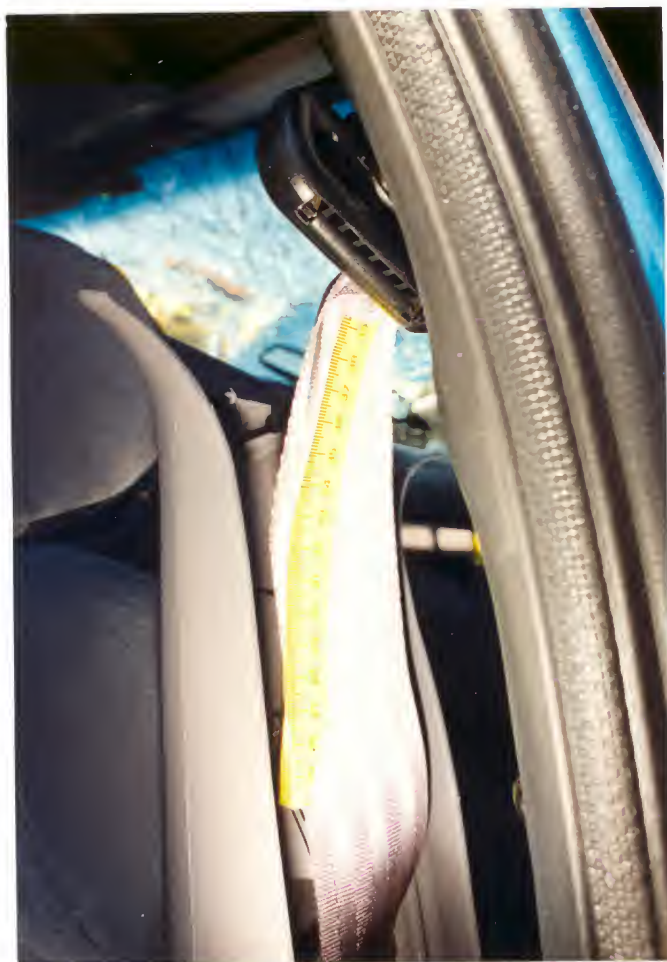
91. Close-up view of contact evident on the right front seat head restraint resulting from rebound contact by the right front occupant.



92. View of the right front seat belt stitching separation at the buckle resulting from occupant loading during the crash.



93. View of the right front torso belt height adjustment.



94. View of the D-ring transfer mark on the right front torso belt.

95. View of the right front torso belt twisted in the D-ring.

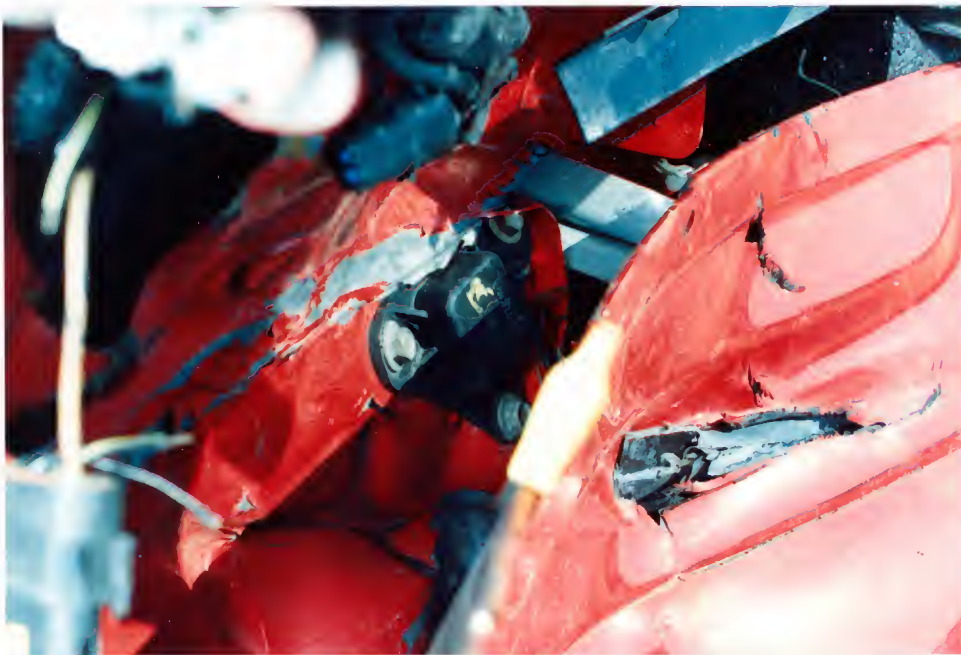


96. View of the rear seat area from the left side of the vehicle.





97. Frontal view of Vehicle #2 (1994 Dodge Intrepid).



98. View of the right front air bag system impact sensor located on the headlamp carrier surface.



99. View of the left front air bag system impact sensor located on the headlamp carrier surface.



100. View of the frontal plane from the left side showing the extent of rearward crush.



101. View of the frontal plane from the right side showing the extent of rearward crush.



102. Left front corner view of Vehicle #2.





103. Lateral view of the left front side of Vehicle #2.



104. Overall view of the left side plane of Vehicle #2.



105. Left rear corner view of Vehicle #2.



106. Right rear corner view of Vehicle #2.





107. View of the right side plane of Vehicle #2.



108. Elevated view of Vehicle #2.





109. Elevated view of the frontal plane showing the extent of crush.



110. Right front corner view of Vehicle #2.



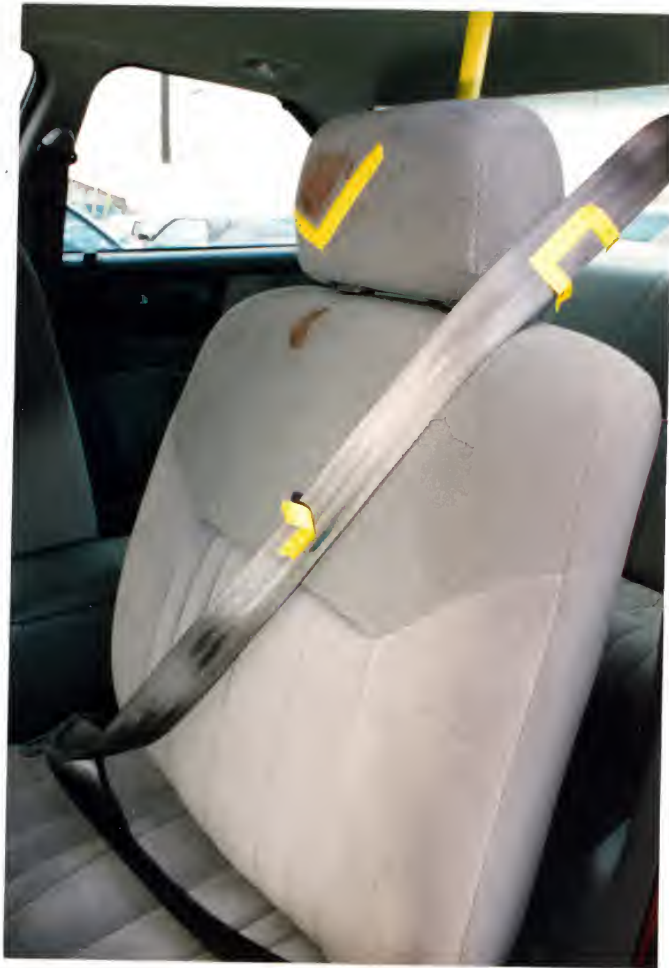
111. Lateral interior view of Vehicle #2 taken from the left side. The driver air bag was pushed back into the air bag module for photographic purposes.



112. Same view as shown in the previous photograph except with the driver air bag fully extended.



113. View of the driver's seat in Vehicle #2 highlighting bodily fluid on the head restraint and seat back rest and contact evidence on the torso belt.



114. Close-up view of the bodily fluid marks on the driver side head restraint and seat back rest.



115. Close-up view of a black transfer mark on the driver's torso belt from the D-ring.



116. Close-up view of a fabric transfer in the torso belt from the driver's clothing.



117. Angular view of Vehicle #2's instrument panel.

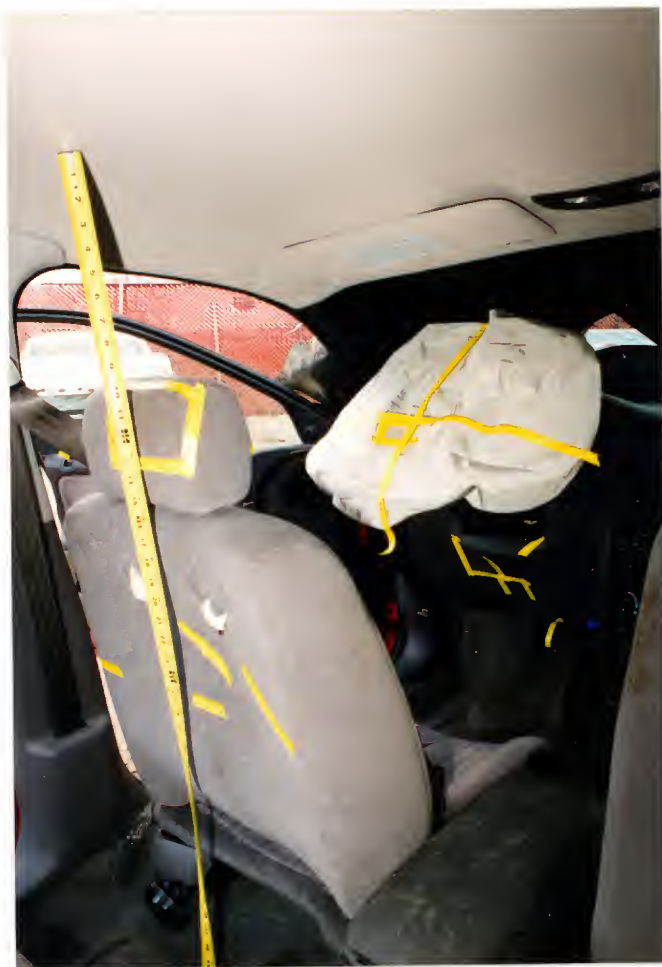


118. View of the driver's knee bolster showing occupant contact which was left of the steering column.





119. View of the deformation to the right side of the brake pedal.



120. View of the driver side air bag and the driver seat back rest highlighting occupant contacts.

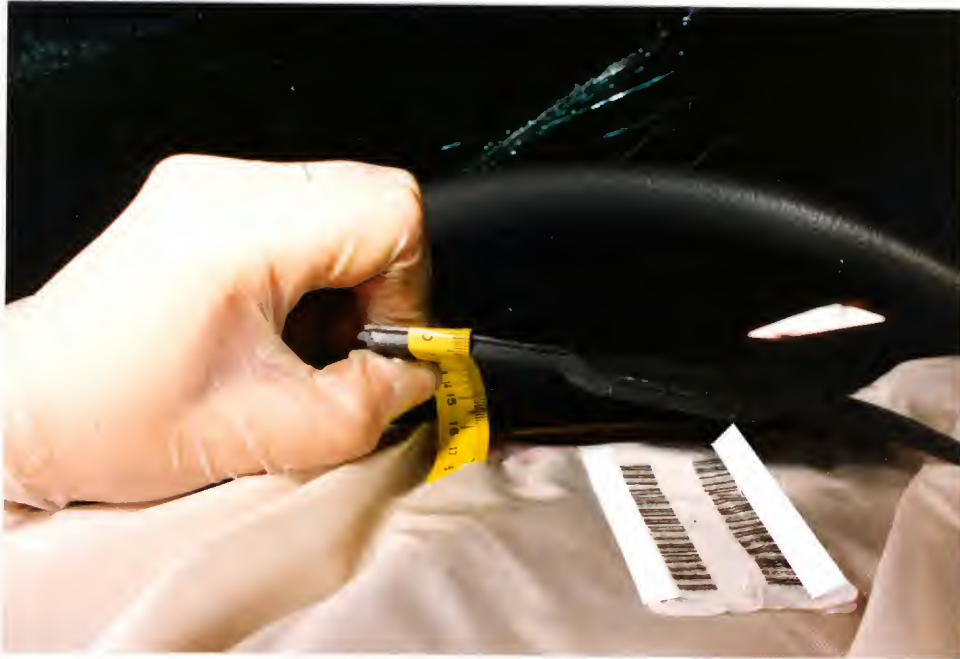




121. View of the driver side air bag.



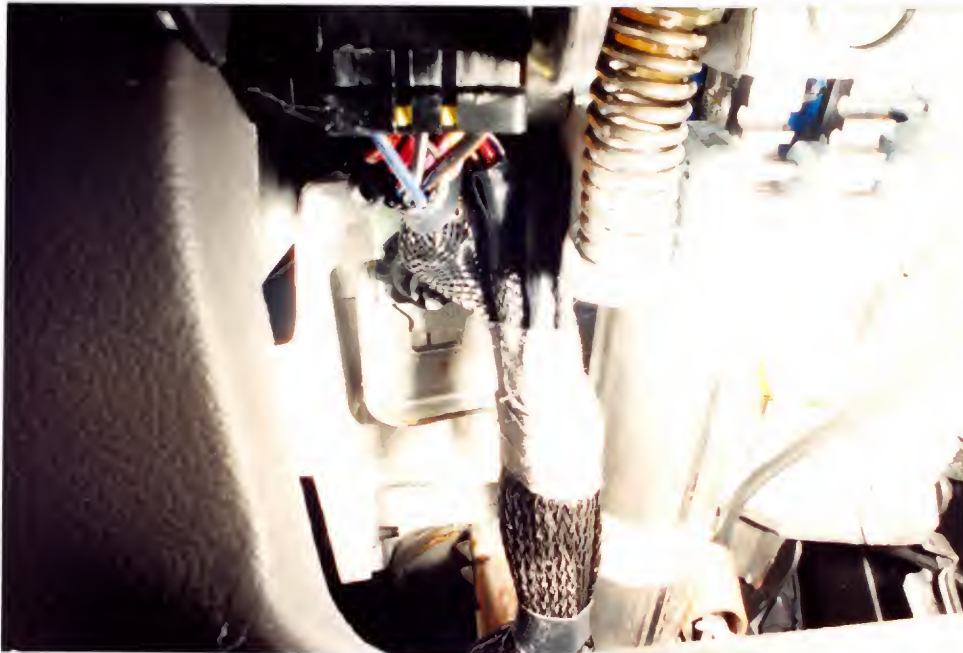
122. Close-up view of lipstick transfer in the upper central area of the lower left quadrant.



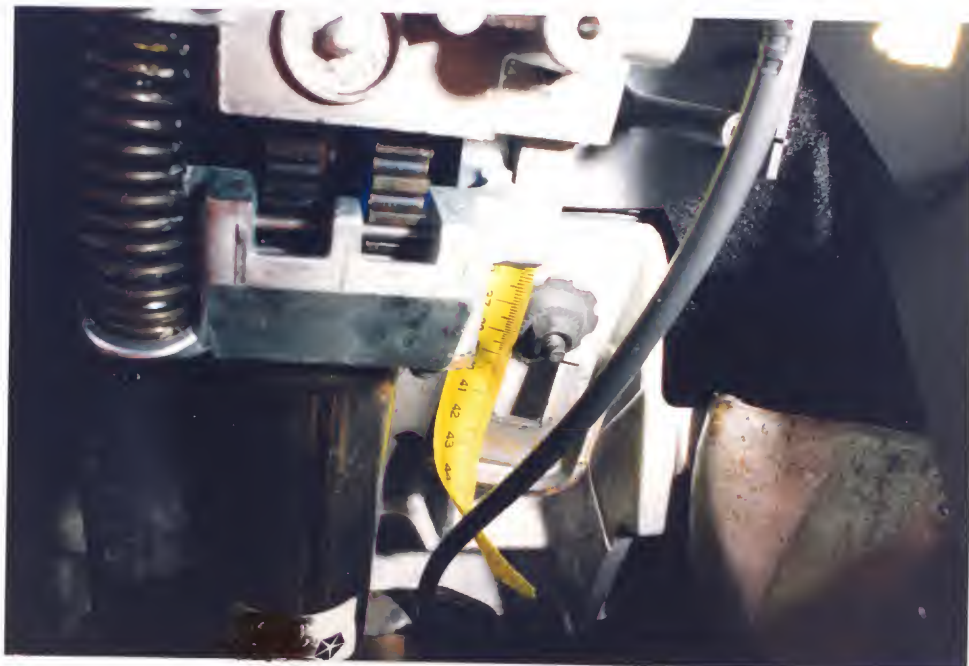
123. View of the driver air bag identification number and thickness of the upper flap of the air bag module.



124. View of the Vehicle #2's steering column shear plate and shear capsules.



125. View of the left shear capsule showing 9.5 mm (0.4") of shear plate movement.



126. View of the right shear capsule showing 25.4 mm (1.0") of shear plate movement.





127. Lateral view of the instrument panel with the both air bags pushed back into the air bag modules.



128. Angular view of the instrument panel showing contact patterns on the glove compartment door by the knees and lower legs of the right front occupant.



129. Close-up view of the contact pattern by the right front passenger's left knee and lower leg on the left side of the glove compartment door and the heavily abraded surface of the adjacent lower instrument panel.



130. Close-up view of the contact pattern by the right front passenger's right knee and lower leg on the right side of the glove compartment door.





131. View of the passenger side air bag of Vehicle #2 which vents propellant gases through its porous material. The air bag was designed without the typical exhaust vent port(s).



132. Closer view of the passenger side air bag showing bodily fluid deposits from the right front occupant.





133. Another view of the passenger side air bag taken from the center of the vehicle interior.



134. Lateral view of the front seating area with both air bags visible.



135. Lateral view of the right front seat showing contact evidence on the torso belt.



136. Close-up view of the contact evidence on the right front torso belt.



137. View of the rear seating area of Vehicle #2 showing contact evidence to the surface of the front seat back rests.



138. View of contact evidence on the left front seat back rest resulting from contact by the left rear occupant.

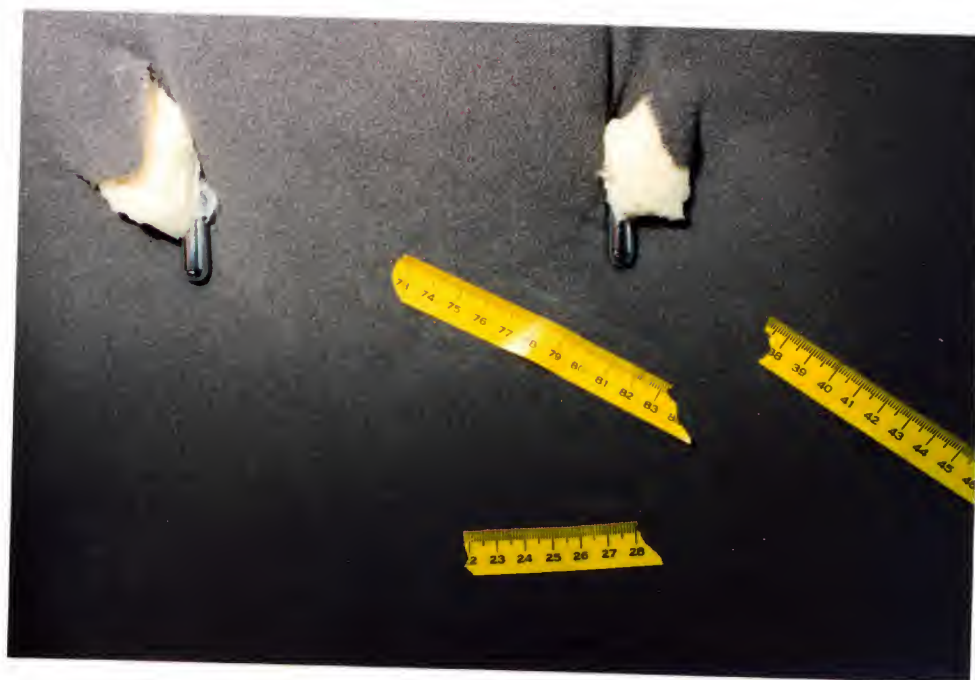


139. View of the back side of the left front head restraint illustrating the distance between the roof liner and the top of the head restraint (the tape measure is calibrated in inches).



140. Close-up view of a contact pattern on the back side of the left front head restraint.

141. Perpendicular view of the contact pattern on the back side of the left front seat back rest.



142. Close-up view of the center of the left seat back rest highlighting the protruding head restraint height adjustment posts and contact evidence.



143. Close-up view of contact evidence on the right side of the left front seat back rest.



144. Close-up view of contact evidence on the left side of the left front seat back rest.





145. Lateral view of the rear seating area looking from the left side of the vehicle.



146. Angular view of the rear seating area which focuses on the right rear occupant space and contact evidence on the back side of the right front seat back rest.

147. Overall view of the right rear seat back rest showing contact evidence and calibrated floor to roof dimensions (calibrated in inches).



148. Closer view of contact evidence on the back surface of the right front seat back rest.

## **Appendix B**

### **SMASH ALGORITHM**



## Summary of Results Using Damage

SCI 95-08

Speed Change  
(Damage)Impact Speed  
(Damage and  
Spinout)

## Vehicle #1

Total	63 km/h ( 39 mph)	73 km/h ( 45 mph)
Longitudinal	-63 km/h ( -39 mph)	73 km/h ( 45 mph)
Latitudinal	0 km/h ( 0 mph)	0 km/h ( 0 mph)
PDOF Angle	0 ½	
Energy Dissipated	= 208798 Joules ( 153981 Ft-Lb)	
Barrier Equivalent Speed	= 62.2 km/h ( 38.6 mph)	
Calculated using crush coefficients entered by the user.		

## Vehicle #2

Total	52 km/h ( 32 mph)	41 km/h ( 25 mph)
Longitudinal	-52 km/h ( -32 mph)	41 km/h ( 25 mph)
Latitudinal	0 km/h ( 0 mph)	0 km/h ( 0 mph)
PDOF Angle	0 ½	
Energy Dissipated	= 177525 Joules ( 130918 Ft-Lb)	
Barrier Equivalent Speed	= 52.2 km/h ( 32.4 mph)	
Calculated using crush coefficients entered by the user.		

## Separation Results

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Separation (Using Spinout)		
us	10 km/h ( 6 mph)	-11 km/h ( -7 mph)
vs	-3 km/h ( -2 mph)	-7 km/h ( -4 mph)
psisd	-36 deg/sec	71 deg/sec

## General Information

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Year	1995	1994
Make	Ford	Dodge
Model	Contour	Intrepid
CDC	12FDEW4	12FDEW3
Side Damaged	F	F
PDOF Angle	0 ½	0 ½
Heading Angle	0 ½	180 ½
Calculation method:	Vehicle's Crush Coeff.	Vehicle's Crush Coeff.
d0 crush coeff.	99.19 sqrt(N)	107.06 sqrt(N)
d1 crush coeff.	6.47 sqrt(N) /cm	6.36 sqrt(N) /cm

## Damage Information

	Vehicle #1 áááááááááá Yes	Vehicle #2 áááááááááá Yes
Vehicle Damage Known		
Crush Length	144.8 cm ( 57 in)	154.9 cm ( 61 in)
C1	31.5 cm ( 12 in)	45.7 cm ( 18 in)
C2	47.0 cm ( 19 in)	63.8 cm ( 25 in)
C3	64.0 cm ( 25 in)	55.6 cm ( 22 in)
C4	82.6 cm ( 33 in)	55.3 cm ( 22 in)
C5	83.1 cm ( 33 in)	60.3 cm ( 24 in)
C6	74.7 cm ( 29 in)	67.3 cm ( 26 in)
D	0.0 cm ( 0 in)	0.0 cm ( 0 in)
D'	9.7 cm ( 4 in)	1.9 cm ( 1 in)

## Scene Information

	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
Impact		
x position	2.8 m ( 9.2 ft)	7.2 m ( 23.6 ft)
y position	1.3 m ( 4.3 ft)	1.4 m ( 4.6 ft)
heading angle	0 ½	180 ½
Rest		
x position	4.1 m ( 13.5 ft)	9.2 m ( 30.2 ft)
y position	0.9 m ( 3.0 ft)	2.6 m ( 8.5 ft)
heading angle	-20 ½	-130 ½
Side-Slip Angle	0 ½	0 ½

## Motion Information

	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
Did Vehicle Rotate?	Yes	Yes
Did Rotation Stop?	No	No
End of Rotation x position	4.1 m ( 13.5 ft)	9.2 m ( 30.2 ft)
End of Rotation y position	0.9 m ( 3.0 ft)	2.6 m ( 8.5 ft)
End of Rotation angle	-20.0 ½	-130.0 ½
Curved Path?	No	No
Curved Path x position	0.0 m ( 0.0 ft)	0.0 m ( 0.0 ft)
Curved Path y position	0.0 m ( 0.0 ft)	0.0 m ( 0.0 ft)
Direction of Rotation	CCW	CW
Amount of Rotation	< 360½	< 360½

Was There Sustained Contact Between the Vehicles? No



## Friction Information

Vehicle #1  
ááááááááááááVehicle #2  
áááááááááááá

## Rolling Resistance

Left Front Wheel	1.00	1.00
Right Front Wheel	1.00	1.00
Left Rear Wheel	0.01	0.01
Right Rear Wheel	0.01	0.01

Coefficient of Friction = 0.50

## Vehicle Dimensions

	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
Length	467.2 cm ( 184 in)	512.4 cm ( 202 in)
Width	175.5 cm ( 69 in)	189.0 cm ( 74 in)
Wheelbase	270.4 cm ( 106 in)	287.0 cm ( 113 in)
Weight	1384 kgs ( 3051 lbs)	1677 kgs ( 3697 lbs)
CG to Front of Veh	228.1 cm ( 90 in)	251.0 cm ( 99 in)
Engine Displacement	2.0 liters	3.3 liters
Moment of Inertia	273079 kgs ( 24171 lbs)	397683 kgs ( 35200 lbs)
Vehicle Mass	1384 kgs ( 7.9 lb-s <sup>2</sup> /in)	1677 kgs ( 9.6 lb-s <sup>2</sup> /in)

## Trajectory Simulation Results

Simulation Time:	0.000 seconds	Integration Step = 0.000 seconds
	Vehicle #1 áááááááááááá	Vehicle #2 áááááááááááá
No. of Iterations	0	0
Best Iteration	0	0
Error	0.000	0.000
Predicted Rest Positions		
x	0.0 m ( 0.0 ft)	0.0 m ( 0.0 ft)
y	0.0 m ( 0.0 ft)	0.0 m ( 0.0 ft)
angle	0.0 ½	0.0 ½
Scene Rest Positions		
x	4.1 m ( 13.5 ft)	9.2 m ( 30.2 ft)
y	0.9 m ( 3.0 ft)	2.6 m ( 8.5 ft)
angle	-20.0 ½	-130.0 ½
Residual Velocity		
Linear	0 km/h ( 0 mph)	0 km/h ( 0 mph)
Angular	0.00 deg/sec	0.00 deg/sec



## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number \_\_\_\_\_
2. Case Number - Stratum 95-08
3. Vehicle Number 01

## VEHICLE IDENTIFICATION

4. Vehicle Model Year 95  
Code the last two digits of the model year  
(99) Unknown
5. Vehicle Make (specify): Ford  
12  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown
6. Vehicle Model (specify): 035  
Contour GL  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

7. Body Type 04  
Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1FALP6531SK (Serial # omitted)  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0  
(0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

## OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown
11. Police Reported Travel Speed 664  
Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown  
\_\_\_\_\_ mph X 1.6093 = \_\_\_\_\_ kmph

12. Speed Limit 072  
(000) No statutory limit  
Code posted or statutory speed limit  
in kmph  
(999) Unknown

\_\_\_\_\_ mph X 1.6093 = \_\_\_\_\_ kmph

13. Police Reported Alcohol Presence For Driver 0  
(0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver 96  
Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: \_\_\_\_\_

15. Police Reported Other Drug Presence For Driver \*0  
(0) No other drug(s) present  
(1) Yes other drug(s) present *\*Police verbally indicated that*  
(7) Not reported  
(8) No driver present  
(9) Unknown *Driver #1 was using an inhalant prior to crash*

16. Other Drug Specimen Test Result For Driver 9  
(0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify): \_\_\_\_\_  
(3) Specimen test given, results unknown or not obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code \_\_\_\_\_  
(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin 1  
(1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify): \_\_\_\_\_  
(8) No driver present  
(9) Unknown



# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 0  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 1  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 2  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 1  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 1  $\ominus 1.7\%$   
 (1) Level  
 (2) Uphill grade ( $> 2\%$ )  
 (3) Hill crest  
 (4) Downhill grade ( $> 2\%$ )  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 2  
 (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 2

- (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 2

- (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions 1

- (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 0

- (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

- (6) Warning sign (not RR crossing)  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 0

- (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown

## PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving 0 1  
 (Prior To Recognition Of Critical Event)  
 (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see
- Distractions*  
 (03) By other occupant(s), (specify): \_\_\_\_\_  
 (04) By moving object in vehicle (specify): \_\_\_\_\_  
 (05) While talking or listening to cellular phone  
 (specify location and type of phone): \_\_\_\_\_  
 (06) While dialing cellular phone (specify location  
 and type of phone): \_\_\_\_\_  
 (07) While adjusting climate controls  
 (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_  
 (09) While using other device/object in vehicle  
 (specify): \_\_\_\_\_  
 (10) Sleepy or fell asleep  
 (11) Distracted by outside person, object, or event  
 (specify): \_\_\_\_\_  
 (12) Eating or drinking  
 (13) Smoking related  
 (97) Distracted/inattentive, details unknown  
 (98) Other, distraction (specify): \_\_\_\_\_  
 (99) Unknown
31. Pre-Event Movement (Prior to 0 1  
 Recognition of Critical Event)  
 (00) No driver present  
 (01) Going straight  
 (02) Decelerating in traffic lane  
 (03) Accelerating in traffic lane  
 (04) Starting in traffic lane  
 (05) Stopped in traffic lane  
 (06) Passing or overtaking another vehicle  
 (07) Disabled or parked in travel lane  
 (08) Leaving a parking position  
 (09) Entering a parking position  
 (10) Turning right  
 (11) Turning left  
 (12) Making a U-turn  
 (13) Backing up (other than for parking position)  
 (14) Negotiating a curve  
 (15) Changing lanes  
 (16) Merging  
 (17) Successful avoidance maneuver to a previous  
 critical event  
 (97) Other (specify): \_\_\_\_\_  
 (99) Unknown
32. Critical Precrash Event 1 0  
*This Vehicle Loss of Control Due To:*  
 (01) Blow out or flat tire  
 (02) Stalled engine  
 (03) Disabling vehicle failure (e.g., wheel fell off)  
 (specify): \_\_\_\_\_  
 (04) Non-disabling vehicle problem (e.g., hood flew  
 up) (specify): \_\_\_\_\_  
 (05) Poor road conditions (puddle, pot hole, ice, etc.)  
 (specify): \_\_\_\_\_  
 (06) Traveling too fast for conditions  
 (08) Other cause of control loss (specify): \_\_\_\_\_  
 (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady  
 speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor  
 vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left  
 lane line  
 (61) From adjacent lane (same direction)—over right  
 lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same  
 direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite  
 direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details  
 unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway  
 (specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching  
 roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown  
 location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown



## 33. Attempted Avoidance Maneuver

01

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

## 34. Pre-Impact Stability

1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Pre-crash stability unknown

## 35. Pre-Impact Location

2

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

## 36. Accident Type

52

(Note: Applicable codes on back of this page)

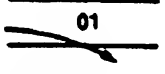
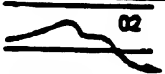

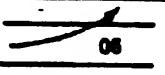
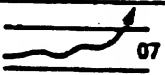
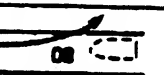



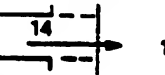
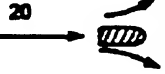
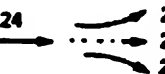
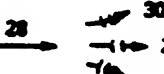
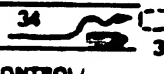
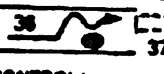
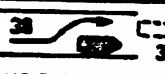

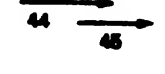

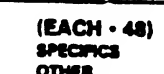

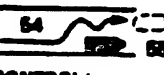
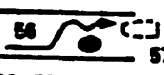

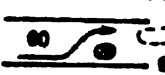
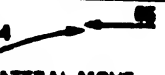

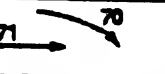

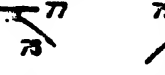


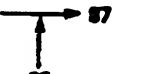

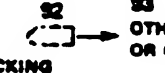
(00) No impact

*Traveling in opposite direction in on-coming lane*  
Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 24 SLOWER 26, 28, 27	 28 DECEL. 29, 30, 31	22 21 23 25 26 27 30 29 31 (EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER (EACH • 43) SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 45 46 47	 46 45 47	 48 45 47	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G Head-On	 50 51 LATERAL MOVE	(EACH • 52) SPECIFICS OTHER	(EACH • 53) SPECIFICS UNKNOWN		
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 52) SPECIFICS OTHER (EACH • 53) SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 65 LATERAL MOVE	(EACH • 66) SPECIFICS OTHER	(EACH • 67) SPECIFICS UNKNOWN		
IV Change Trafficway Vehicle Turning	J Turn Across Path	 69 68 INITIAL OPPOSITE DIRECTIONS	 71 70 INITIAL SAME DIRECTIONS	 73 72	(EACH • 74) SPECIFICS OTHER	(EACH • 75) SPECIFICS UNKNOWN
	K Turn Into Path	 77 76 TURN INTO SAME DIRECTION	 79 78 TURN INTO OPPOSITE DIRECTIONS	 81 80 82	(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 87 88	 89 88	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M Backing Etc	 92 93 BACKING VEH.	OTHER VEH. OR OBJECT	98 Other Accident Type 99 Unknown Accident Type 00 No Impact		

## OCCUPANT RELATED

37. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
38. Number of Occupants This Vehicle 0 2  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
39. Number of Occupant Forms Submitted 0 2

## AIR BAG RELATED

40. Is this an AOPS Vehicle? 1  
(0) No (includes unknown)  
(1) Yes - researcher determined  
(2) VIN determined air bag system  
(3) VIN determined automatic (passive) belts  
(4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6  
(0) Not equipped or not available  
(1) No air bags deployed  
*Single Air Bag Vehicle*  
(2) Driver air bag deployed  
(3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
(4) Driver side only deployed  
(5) Passenger side only deployed  
(6) Driver and passenger side deployed  
(7) Driver and passenger side unknown if deployed  
(8) Air bag(s) deployed, details unknown  
(9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
(0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown
- Specify type of "other" air bag present: \_\_\_\_\_

## VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1.260  
Code weight to nearest 10 kilograms.  
(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown  
\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs  
Source: MUMA

44. Vehicle Cargo Weight 0.020  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown  
\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: \_\_\_\_\_

## ROLLOVER DATA

45. Rollover 00  
(00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
(01-16) Code the number of quarter turns Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
(99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
(00) No rollover  
(01) Trip-over  
(02) Flip-over  
(03) Turn-over  
(04) Climb-over  
(05) Fall-over  
(06) Bounce-over  
(07) Collision with another vehicle  
(08) Other rollover initiation type specify): \_\_\_\_\_  
(98) Rollover--end-over-end  
(99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
(0) No rollover  
(1) On roadway  
(2) On shoulder--paved  
(3) On shoulder--unpaved  
(4) On roadside or divided trafficway median  
(8) Rollover--end-over-end  
(9) Unknown
48. Rollover Initiation Object Contacted 00  
(Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
(0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify): \_\_\_\_\_  
(6) Non-contact rollover forces (specify): \_\_\_\_\_  
(8) Rollover--end-over-end  
(9) Unknown
50. Direction of Initial Roll 0  
(0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(8) Rollover--end-over-end  
(9) Unknown roll direction



## OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride
- Override (see specific CDC)*  
*[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*
- (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify): \_\_\_\_\_
- Underride (see specific CDC)*  
*[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*
- (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify): \_\_\_\_\_
- (7) Medium/heavy truck or bus override (of any configuration)  
 (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown

53. Heading Angle For This Vehicle 180
54. Heading Angle For Other Vehicle 900

## RECONSTRUCTION DATA

55. Towed Trailing Unit 0
- (0) No towed unit  
 (1) Yes—towed trailing unit  
 (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No  
 (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted < 45 degrees  
 (4) Tilted ≥ 45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify): \_\_\_\_\_
- (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS  
HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 02

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program  
 -damage only routine  
 (02) Reconstruction program  
 -damage and trajectory routine  
 (03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover  
 (06) Other non-horizontal forces  
 (07) Sideswipe type damage  
 (08) Severe override  
 (09) Yielding object  
 (10) Overlapping damage  
 (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify): \_\_\_\_\_

- (98) Other, (specify): \_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

063

Highest

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

60. Longitudinal Component of  
Delta V+0063

Highest

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than  
-0.5 kmph and less than +0.5 kmph)  
(±160) ±159.5 kmph and above  
(\_\_999) Unknown

61. Lateral Component of Delta V

-000

Highest

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than -0.5 kmph  
and less than +0.5 kmph)  
(±160) ±159.5 kmph and above  
(\_\_999) Unknown

62. Energy Absorption

208,800

\_\_\_\_ Nearest 100 joules (highest)

\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

63. Impact Speed

073

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
(160) 159.5 kmph and above  
(998) Trajectory algorithm not run  
(999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program  
Results (For Highest Delta V)1

- (0) No reconstruction  
(1) Collision fits model — results appear reasonable  
(2) Collision fits model — results appear high  
(3) Collision fits model — results appear low  
(4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

062

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? ☐ YES ☐ NOIF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? ☐ YES ☐ NO

## ESTIMATED DELTA V

## VEHICLE INSPECTION

66. Estimated Highest Delta V (Researcher Determined)

0

(0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph
- (2)  $\geq 10$  kmph but  $< 25$  kmph
- (3)  $\geq 25$  kmph but  $< 40$  kmph
- (4)  $\geq 40$  kmph but  $< 55$  kmph
- (5)  $\geq 55$  kmph

*Other estimates of damage severity*

- (6) Minor
- (7) Moderate
- (8) Severe
- (9) Unknown

67. Type of Vehicle Inspection

3

- (0) No inspection
- (1) Vehicle fully repaired-no damage evident
- (2) Partial inspection (specify):
- (3) Complete inspection

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	

## VEHICLE IDENTIFICATION

VIN 1 F A L P 6 5 3 1 S K (Serial # omitted) Built 9/94  
 Vehicle Make (specify): Ford Model Year 95  
 Vehicle Model (specify): Contour GL

## LOCATOR

**Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.**

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	Entire frontal Plane	Entire frontal Plane	C5
	Begins 58.4cm (23.0") (4) <del>off</del>		

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

## VEHICLE DAMAGE SKETCH

## TIRE—WHEEL DAMAGE

a. Rotation physically restricted

b. Tire deflated

 RF 1  
 LF 1  
 RR 2  
 LR 2

 RF 2  
 LF 1  
 RR 2  
 LR 2

(1) Yes (2) No (8) NA (9) Unk.

## TYPE OF TRANSMISSION

☐ Manual ☒ AutomaticEND SHIFT  $\geq$  10 CM☒ Yes ☐ No (Downward)

## ORIGINAL SPECIFICATIONS

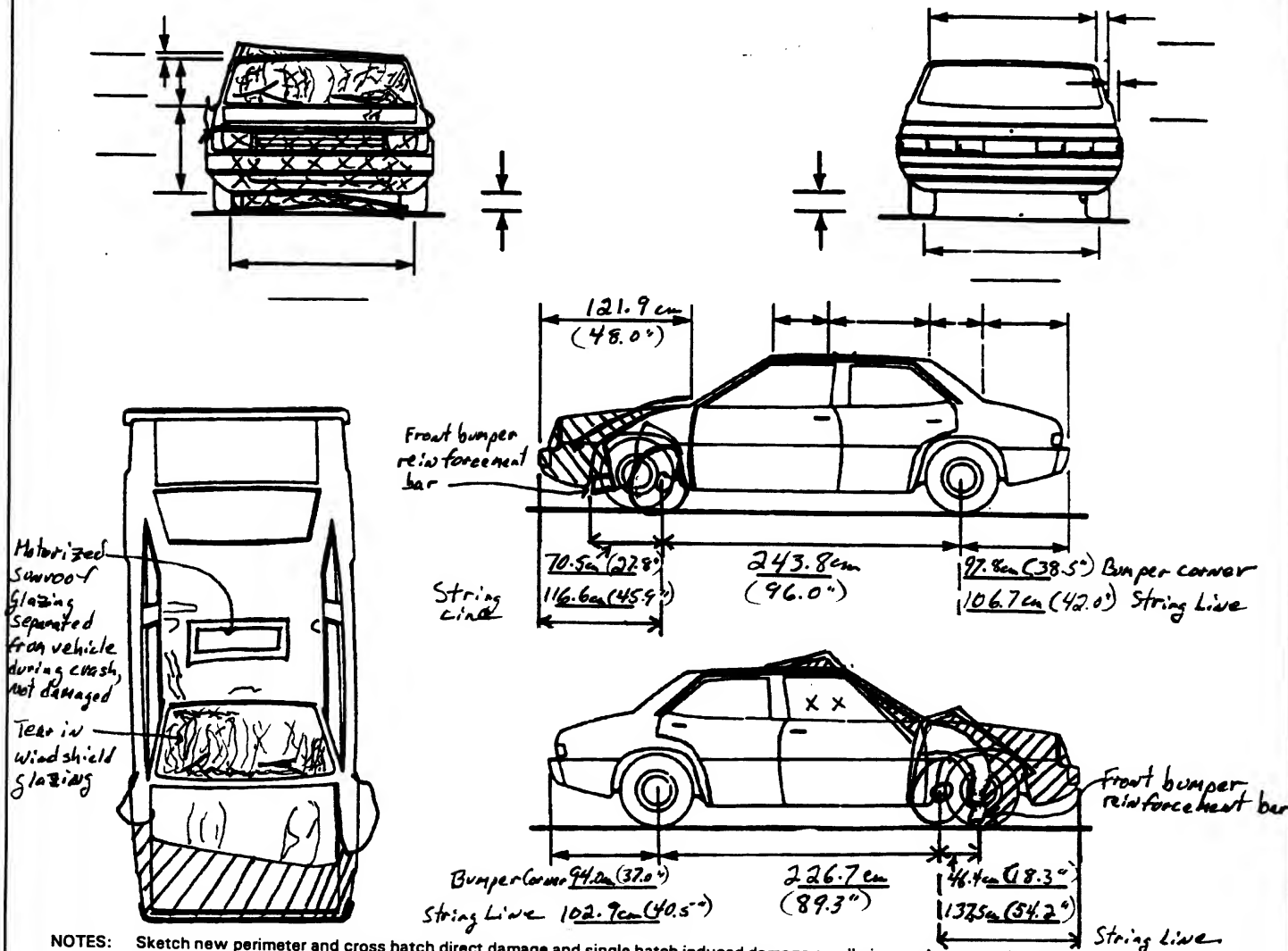
 Wheelbase (106.5") 270.5 cm  
 Overall Length (183.9") 467.1 cm  
 Maximum Width (69.1") 175.5 cm  
 Curb Weight (2,769 lb) 1,256.0 kg  
 Average Track (58.9") 149.5 cm  
 Front Overhang (36.9") 93.7 cm  
 Rear Overhang (40.5") 102.9 cm  
 Undeformed End Width (57.0") 144.8 cm  
 Engine Size: cyl./displ. 2.0 L
WHEEL STEER ANGLES  
(For locked front wheels or displaced rear axles only)RF  $\oplus$  8 °LF  $\oplus$  2 °RR  $\pm$  NA °LR  $\pm$  NA °Within  $\pm$  5 degrees

## DRIVE WHEELS

☒ FWD ☐ RWD ☐ 4WDApproximate  
Cargo Weight  $\approx$  18 kg  
( $\approx$  40 lb)

## MEASUREMENTS IN CENTIMETERS

Box of Books



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.





## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>52</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>04</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>145</u> (57.0")	<u>032</u> (12.4")	<u>047</u> (18.5")	<u>064</u> (25.2")	<u>083</u> (32.5")	<u>083</u> (32.7")	<u>075</u> (29.4")	<u>+ 010</u> (-3.8")

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
_____	_____	_____	_____	_____	_____	_____	<u>+</u> <u>-</u>

## 26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter 145  
(250) 250 centimeters or more (57.0")  
(998) No highest severity end plane impact  
(999) Unknown

## 27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter 126  
(250) 250 centimeters or more (49.5")  
(999) Unknown

## 28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more  
(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

## 29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more  
(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

0

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

0

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

### FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

0

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

0

- (9) Unknown

### FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap

3

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle)  
on left side plane  
(3) Aft of center of the rear wheels (rear axle)  
on right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear  
axle) on left side plane  
(7) Over the center of the rear wheels (rear  
axle) on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

1

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

4

40. Location of Fuel Tank-2

0

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

0

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

0

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1

0 1

46. Fuel Type-2

00*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**


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\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.





## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

## INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 3 7. LR 1 8. RR 1 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch  
Opening in Collision. If IV05-IV09  $\neq$  2, Then code 010. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,  
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 220. BL 2 21. Roof 3 22. Other 0

(0) No glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted (original)

(4) AS-2 - Tempered-with after market tint

(5) AS-3 - Tempered-tinted (with additional after market tint)

(6) AS-14 - Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 228. BL 1 29. Roof 2 30. Other 0

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 3 32. LF 1 33. RF 6 34. LR 1 35. RR 136. BL 1 37. Roof 4 38. Other 0

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or holed) and not holed from  
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 144. BL 1 45. Roof 1 46. Other 0

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant

contact and not holed by occupant contact

(6) Glazing out-of-place by occupant contact and holed by  
occupant contact

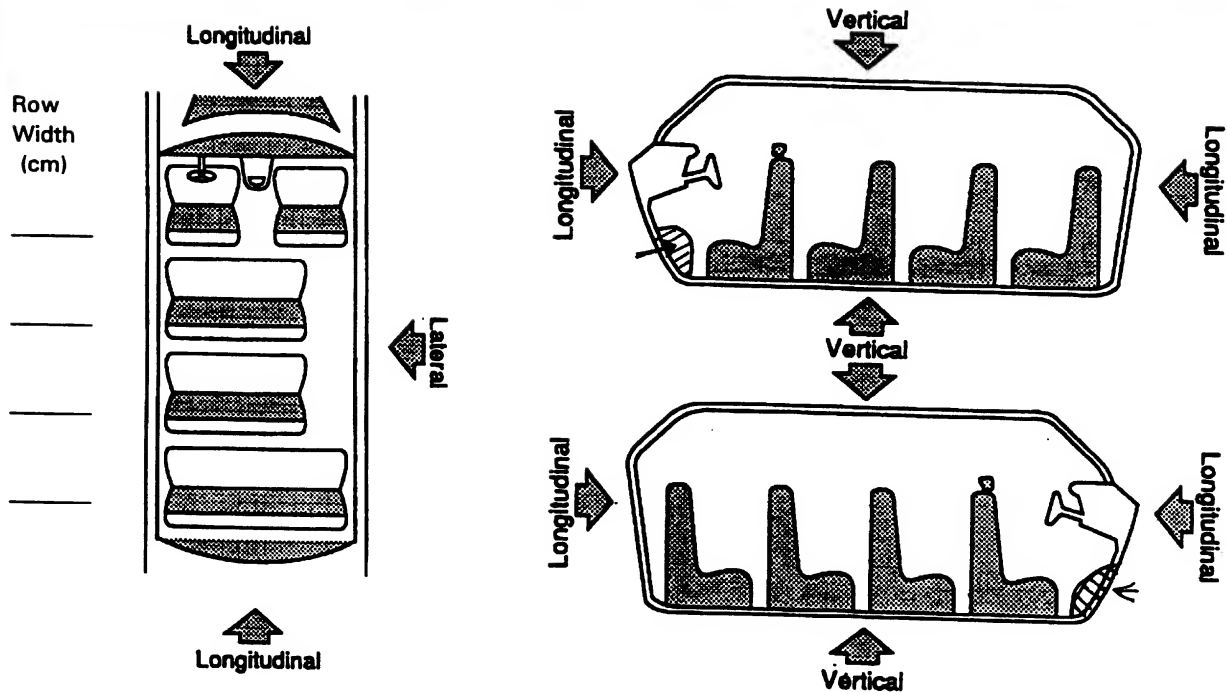
(7) Glazing removed prior to accident

(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
11	Toe pan / floor pan located @ forward edge of plastic mat	Toe pan adjacent to plastic mat foot rest 116.2cm (45.8")	81.3cm (32.0")	34.9cm (13.8")	Longitudinal
	edge of plastic mat 40.6cm (16") L of &	Plastic mat foot rest 108.7cm (42.8")	81.3cm (32.0")	27.4cm (10.8")	Longitudinal
		-	-	=	
11	Brake pedal	103.6cm (40.8")	83.8cm (33.0")	19.8cm (7.8")	Longitudinal
		-	-	=	
13	Toe Pan @ Floor pan 30.5cm (12") R of &	120.7cm (47.5")	64.8cm (25.5")	55.9cm (22.0")	Longitudinal
13	Right upper corner of instrument panel	72.4cm (28.5")	53.3cm (21.0")	19.1cm (7.5")	Longitudinal
		-	-	=	
21	Second seat back rest from back in trunk	80.0cm (31.5")	63.5cm (25.0")	16.5cm (6.5")	Longitudinal
22	"	80.0cm (31.5")	64.8cm (25.5")	15.2cm (6.0")	Longitudinal
23	"	80.0cm (31.5")	71.1cm (28.0")	8.9cm (3.5")	Longitudinal
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	

Document no more than the 15 most severe intrusions

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify):

Brake pedal

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## LOCATION OF INTRUSION

## Front Seat

- (11) Left
- (12) Middle
- (13) Right

## Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

## Second Seat

- (21) Left
- (22) Middle
- (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify)

(99) Unknown

## Third Seat

- (31) Left
- (32) Middle
- (33) Right

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

1st 47. 13 48. 05 49. 5 50. 22nd 51. 11 52. 05 53. 4 54. 23rd 55. 11 56. 27 57. 3 58. 24th 59. 13 60. 04 61. 3 62. 25th 63. 21 64. 21 65. 3 66. 26th 67. 22 68. 21 69. 3 70. 27th 71. 23 72. 21 73. 2 74. 2

8th 75. \_\_\_\_\_ 76. \_\_\_\_\_ 77. \_\_\_\_\_ 78. \_\_\_\_\_

9th 79. \_\_\_\_\_ 80. \_\_\_\_\_ 81. \_\_\_\_\_ 82. \_\_\_\_\_

10th 83. \_\_\_\_\_ 84. \_\_\_\_\_ 85. \_\_\_\_\_ 86. \_\_\_\_\_



## STEERING COLUMN

## INSTRUMENT PANEL

## 87. Steering Column Type

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

## 88. Tilt Steering Column Adjustment

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

## 89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

## 90. Steering Rim/Spoke Deformation

- Code actual measured  
 deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

## 91. Location of Steering Rim/Spoke Deformation

- (00) No steering rim deformation

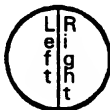
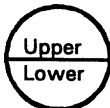
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## 92. Odometer Reading

\_\_\_\_\_ kilometers

Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

— 6.744 miles X 1.6093 = — 10.853 kilometers

Source: \_\_\_\_\_

## 93. Instrument Panel Damage from Occupant Contact?

- (0) No  
 (1) Yes  
 (9) Unknown

## 94. Type of Knee Bolster Covering

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## 95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

## 96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

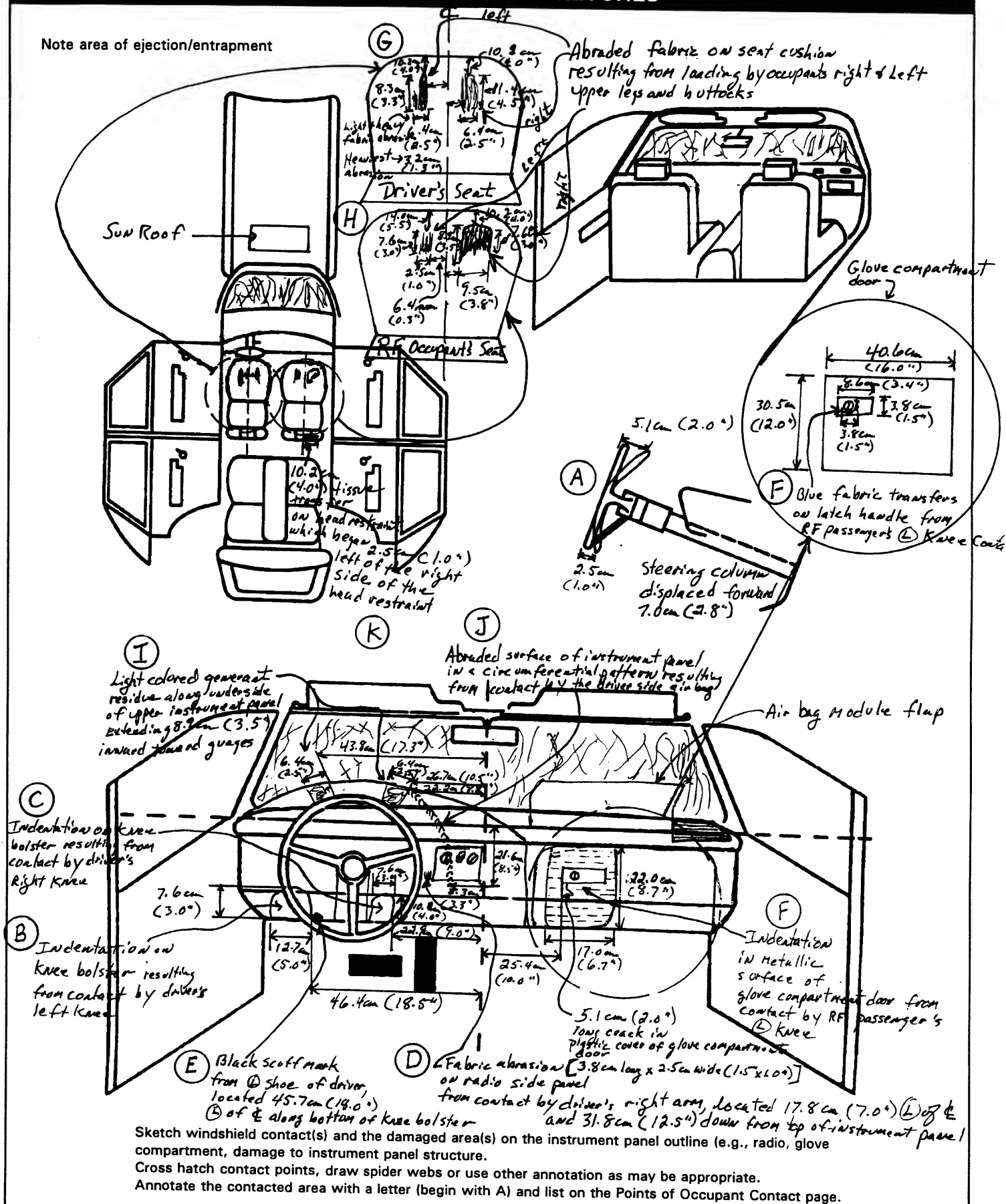
## 97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_  
☐ Additional or relocated switches (specify): \_\_\_\_\_  
☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown

## VEHICLE INTERIOR SKETCHES

**Note area of ejection/entrapment**



# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. If a Child safety seat is present, encode the data on the back of this page. If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	NA	4
	Evidence of usage	00		04
	Used in this crash?	00		04
	Proper Use	00		1
	Failure Modes	00		1
	Anchorage Adjustment	2		4-latch above full bottom adjustment
SECOND	Availability	4	3	4
	Evidence of usage	00	00	00
	Used in this crash?	00	00	00
	Proper Use	00	00	00
	Failure Modes	00	00	00
	Anchorage Adjustment	00	00	00
OTHER	Availability			
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment



## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	004	01	upper torso	Steering rim (upper & lower) displaced forward	1
B	014	01	(L) Knee	Indentation	1
C	014	01	(R) Knee	Indentation	1
D	011	01	(R) arm	Fabric abrasion on radio side panel	2
E	014	01	(L) foot	Black transfer	2
F	014	02	(L) knee/leg	Large indentation of glove compartment/bolster	1
G	151	01	(L)(R) buttocks	Deep fabric abrasions of seat cushion	1
H	151	02	(L)(R) buttocks	Deep fabric abrasion of seat cushion	1
I	010	—	—	Light colored air bag generant residue	1
J	010/011	—	—	Abraded surface in a circumferential pattern by air bag	1
K	155	02	Head	Tissue transfer which measured 10.2cm x 3.8cm (4.0" x 1.5")	1
L					
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify):  
 (195) Other air bag compartment cover (specify):

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

## AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

## AIR BAGS

		Left Front	Right Front	Other
F I R S T	Availability/Function	/	/	0
	Deployment	/	/	0
	Failure	/	/	0

## Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

## Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled  
(9) Unknown

## Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(9) Unknown

## Frontal Air Bag System Deployment (This Occupant Position)

- (0) Not equipped/not available  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, accident sequence undetermined  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

## AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	0	0
	Use	/	/
	Type	/	/
	Proper Use	/	/
	Failure Modes	/	/

## Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

## Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

## Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

## Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

## Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

## Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
(8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

## Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown

# FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	1	1
Flaps open at tear points?	2	2
Flaps damaged?	1	1 Deformation of cover
Air bag damaged?	01	04-
Source of air bag damage	01	88
Air bag tethered?	2 - 4 tethers	1
Air bag have vent ports?	2 - 2 vents	2 - 1 vent
Other occupant contact air bag?	1	1
Occupant wearing eyewear?	1	1

## Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

## Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- Interaction w/ metal edge of air bag flap
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Did The Air Bag Have Vent Ports?

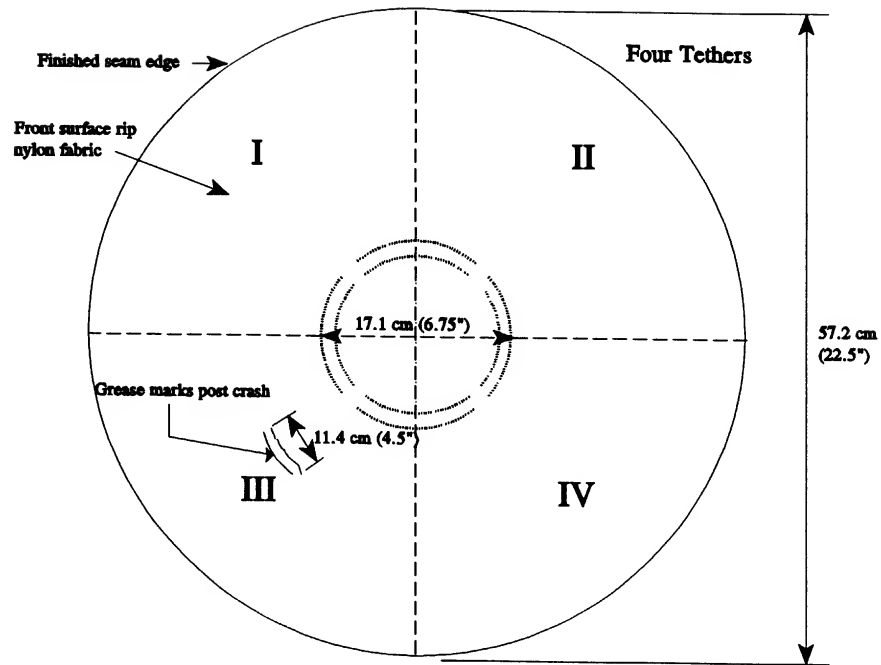
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

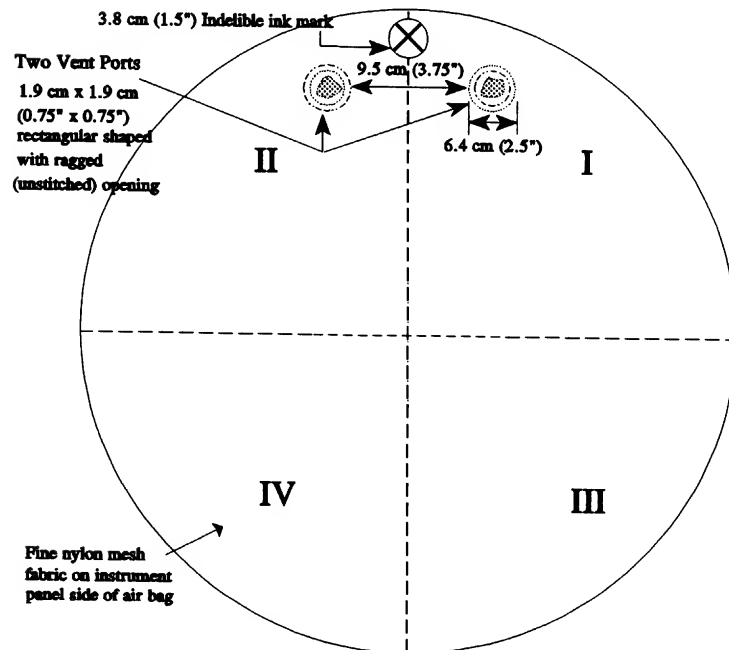
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown



**Tethered Driver Side Air Bag of Vehicle #1 (Front Side)**



**Tethered Driver Side Air Bag of Vehicle #1 (Reverse Side)**



## DRIVER AIR BAG SKETCHES (Cont'd)

### 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

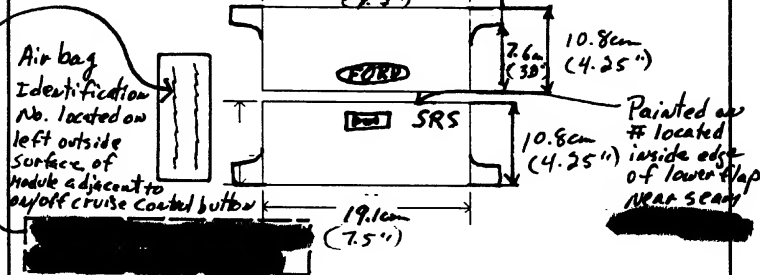
width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

height ( $H_L$ ) \_\_\_\_\_

Flap thickness - 4.8 mm  
(0.19")

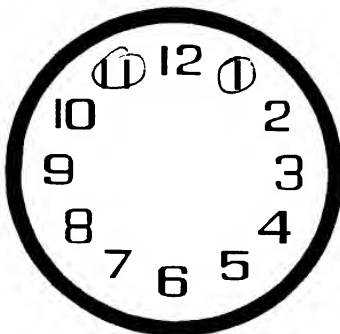
2.8 cm (1.1")

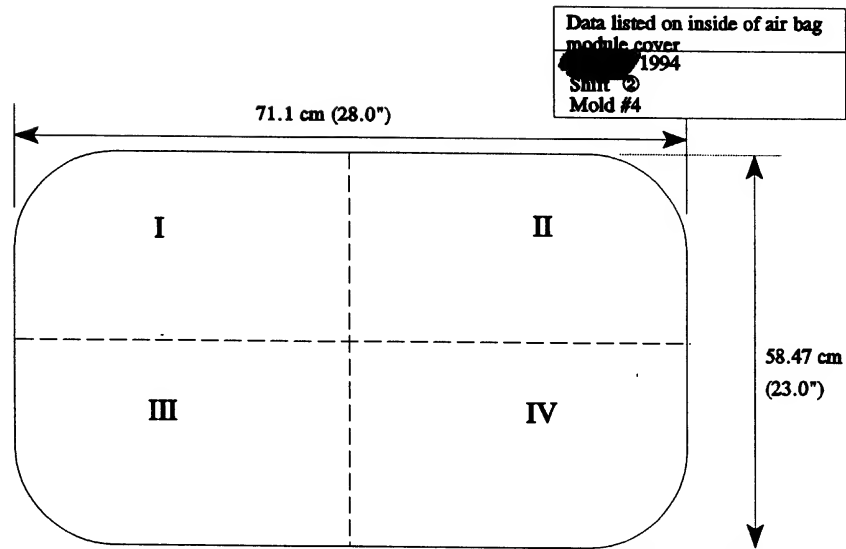


### 4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

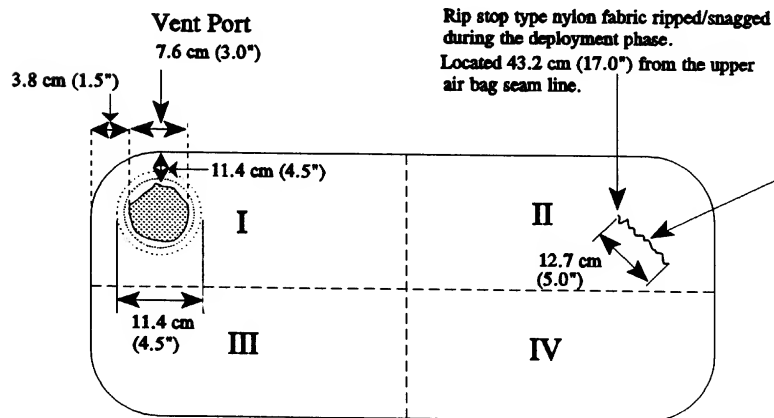
### 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS





**Front Surface of Passenger Side Air Bag of Vehicle #1**



**Instrument Panel Side (Rear) of the Passenger Side Air Bag of Vehicle #1**

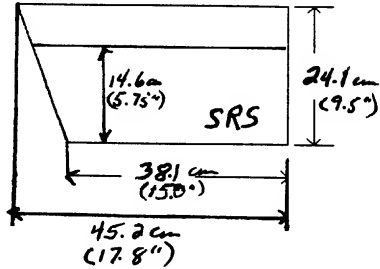
## PASSENGER AIR BAG SKETCHES (Cont'd)

### 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

a. Flap

width (W) \_\_\_\_\_

height (H) \_\_\_\_\_



### 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

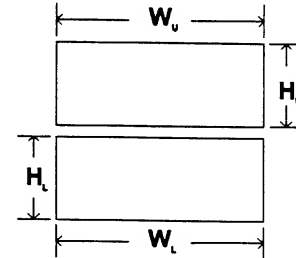
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

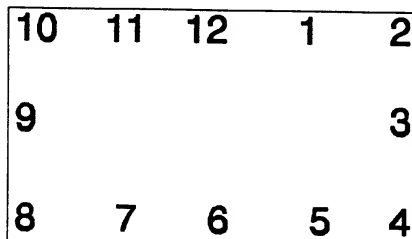
height ( $H_L$ ) \_\_\_\_\_



### 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

### 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

NA

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

NA



## HEAD RESTRAINTS/SEAT EVALUATION

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3- Adj. down	/	3- Adj. down
	Seat Type	01		01
	Seat Performance	1- Floor in front of cleared track		1- Track jammed
	Seat Orientation	1		1
	Seat Track Position	5		4- Probable
	Seat Back Incline Pre/Post Impact	20° rearward of vertical		10° rearward of vertical
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	6	6	6
	Seat Orientation	1	1	1
	Seat Track Position	1	1	1
	Seat Back Incline Pre/Post Impact	01	01	01
THIRD	Head Restraint Type/Damage	/	/	/
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
	Seat Track Position	/	/	/
	Seat Back Incline Pre/Post Impact	/	/	/
OTHER	Head Restraint Type/Damage	/	/	/
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
	Seat Track Position	/	/	/
	Seat Back Incline Pre/Post Impact	/	/	/

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## HEAD RESTRAINTS/SEAT EVALUATION

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other  
Specify: \_\_\_\_\_
- (9) Unknown

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

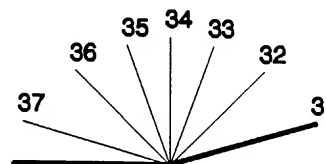
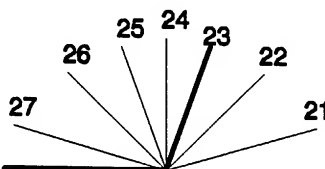
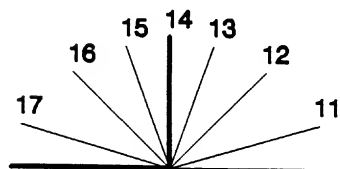
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [ ☒ ] Yes [ ☐ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

**(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No [ ☒ ] Yes [ ☐ ]

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)



# OCCUPANT ASSESSMENT FORM

BEST AVAILABLE

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_ inches X 2.54 = \_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999)Unknown

\_\_\_\_ pounds X .4536 = \_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown



## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_

0

- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_

(9) Unknown

## 15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

## 16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

2

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

19. Manual (Active) Belt System Use 02

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt \_\_\_\_\_
- (03) Lap belt \_\_\_\_\_
- (04) Lap and shoulder belt \_\_\_\_\_
- (05) Belt used—type unknown \_\_\_\_\_
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used \_\_\_\_\_

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Shoulder Belt Upper Anchorage Adjustment 2

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown \_\_\_\_\_
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## POLICE REPORTED RESTRAINT USE

## AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 1

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative
- ☐ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):

☐ Unknown if belt used

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30. Frontal Air Bag System Availability/Function (This Occupant Position) 1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

*Specify type of "other" air bag present:*

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33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position)     

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 0.1

- (00) Not equipped/not available  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0 0 6 3

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 0 1

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown



**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 20  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 9  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 1  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 5  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 23  
 (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

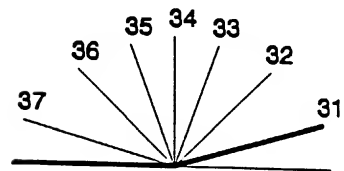
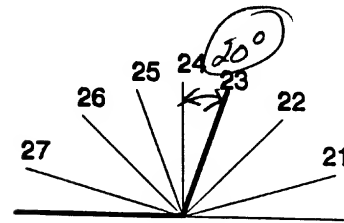
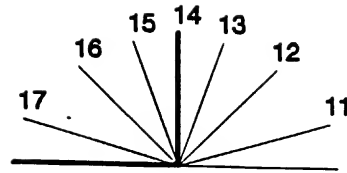
*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position

(99) Unknown



54. Seat Performance (this Occupant Position) f  
 (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
     (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment  
     intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 0  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify):  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*  
 (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
 (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
 harness/shield/tether added

(09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

**64. Hospital Stay**00

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost**97

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**



**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death 08  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

67. 1st Medically Reported Cause of Death 08

68. 2nd Medically Reported Cause of Death 08

69. 3rd Medically Reported Cause of Death 08  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify):  
 \_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify):  
 \_\_\_\_\_

(99) Unknown

70. Number of Recorded Injuries for This Occupant 92  
 \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score 97  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

72. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 92  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 1  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used



## OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_ inches X 2.54 = \_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999)Unknown

\_\_\_\_ pounds X .4536 = \_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

0

## 15. Medium Status (Immediately Prior To Impact)

0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

## 16. Entrapment

0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

## 17. Occupant Mobility

2

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

19. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt \_\_\_\_\_
- (03) Lap belt \_\_\_\_\_
- (04) Lap and shoulder belt \_\_\_\_\_
- (05) Belt used—type unknown \_\_\_\_\_
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used \_\_\_\_\_

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Manual (Active) Belt Failure Modes During Accident +

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Shoulder Belt Upper Anchorage Adjustment 4

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown \_\_\_\_\_
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_



## POLICE REPORTED RESTRAINT USE

## AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 1

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):  
 (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative  
☐ Vehicle inspection  
☐ Official injury data  
☐ Driver/occupant interview  
☐ Other (specify):  
☐ Unknown if belt used

30. Frontal Air Bag System Availability/Function (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 0 1

- (00) Not equipped/not available  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0 6 3

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 0 4

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 88  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify): IP & housing for air bag  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports): 1  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 9  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 1  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 4  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
 Adjustable Seat Track  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

\* Seat jammed

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 23

- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

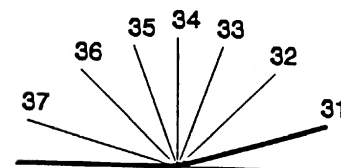
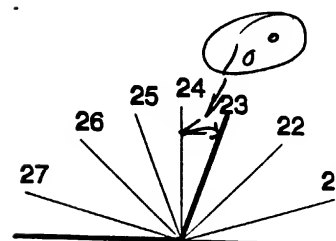
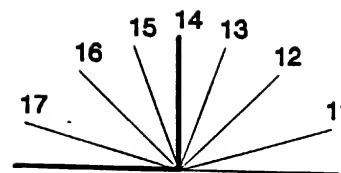
*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position

(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown



## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify): \_\_\_\_\_

(998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 2  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify): \_\_\_\_\_

(8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 000  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify): \_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*  
 (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify): \_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify): \_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
 harness/shield/tether added

(09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**2

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

**64. Hospital Stay**99

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost**92

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**

## 66. Time to Death

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

## 67. 1st Medically Reported Cause of Death

## 68. 2nd Medically Reported Cause of Death

## 69. 3rd Medically Reported Cause of Death

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

## 70. Number of Recorded Injuries for This Occupant

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

## 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

## 72. Was the Occupant Given Blood?

- (1) No - blood not given  
(2) Yes - blood given (specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub>

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**

## 74. Primary Source of Belt Use Determination

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used



## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

## VEHICLE IDENTIFICATION

4. Vehicle Model Year

Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1 B 3 H D 4 6 T 3 R F (Serial # omitted)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)

No VIN—Code all zeros Unknown—Code all nines

9. Vehicle Special Use (This Trip)

(0) No special use

(1) Taxi

(2) Vehicle used as school bus

(3) Vehicle used as other bus

(4) Military

(5) Police

(6) Ambulance

(7) Fire truck or car

(8) Other (specify):

(9) Unknown

## OFFICIAL RECORDS

10. Police Reported Vehicle Disposition

(0) Not towed due to vehicle damage

(1) Towed due to vehicle damage

(9) Unknown

11. Police Reported Travel Speed

Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

mph X 1.6093 = kmph

12. Speed Limit

(000) No statutory limit

Code posted or statutory speed limit  
in kmph

(999) Unknown

mph X 1.6093 = kmph

13. Police Reported Alcohol Presence For Driver

(0) No alcohol present

(1) Yes alcohol present

(7) Not reported

(8) No driver present

(9) Unknown

14. Alcohol Test Result For Driver

Code actual value (decimal implied  
before first digit—0.xx)

(95) Test refused

(96) None given

(97) AC test performed, results unknown

(98) No driver present

(99) Unknown

Source:

15. Police Reported Other Drug Presence For  
Driver

(0) No other drug(s) present

(1) Yes other drug(s) present

(7) Not reported

(8) No driver present

(9) Unknown

16. Other Drug Specimen Test Result For Driver

(0) No specimen test given

(1) Drug(s) not found in specimen

(2) Drug(s) found in specimen, (specify):

(3) Specimen test given, results unknown or not  
obtained

(8) No driver present

(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code

(99998) No driver present

(99999) Unknown

18. Driver's Race/Ethnic Origin

(1) White (non-Hispanic)

(2) Black (non-Hispanic)

(3) White (Hispanic)

(4) Black (Hispanic)

(5) American Indian, Eskimo or Aleut

(6) Asian or Pacific Islander

(7) Other (specify):

(8) No driver present

(9) Unknown



# CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

### Utility Vehicles ( $\leq 4,500$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

### Van Based Light Trucks ( $\leq 4,500$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,500$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,500$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,500$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,500$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, $\leq 4,500$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)

- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

### Other Light Trucks ( $\leq 4,500$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

### Medium/Heavy Trucks ( $> 4,500$ kgs GVWR)

- (60) Step van ( $> 4,500$  kgs GVWR)
- (61) Single unit straight truck ( $4,500$  kgs  $<$  GVWR  $\leq 8,850$  kgs)
- (62) Single unit straight truck ( $8,850$  kgs  $<$  GVWR  $\leq 12,000$  kgs)
- (63) Single unit straight truck ( $> 12,000$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

## PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 0
- (0) Non-interchange area and non-junction
- (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related
- (3) Driveway, alley access related
- (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 0
- (0) Not physically divided (two way traffic)
- (1) Divided trafficway-median strip without positive barrier
- (2) Divided trafficway-median strip with positive barrier
- (3) One way traffic
- (9) Unknown

21. Number Of Travel Lanes 2
- (1) One
- (2) Two
- (3) Three
- (4) Four
- (5) Five
- (6) Six
- (7) Seven or more
- (9) Unknown

22. Roadway Alignment 1
- (1) Straight
- (2) Curve right
- (3) Curve left
- (9) Unknown

23. Roadway Profile 1  $\oplus 1.7\%$
- (1) Level
- (2) Uphill grade (>2%)
- (3) Hill crest
- (4) Downhill grade (>2%)
- (5) Sag
- (9) Unknown

24. Roadway Surface Type 2
- (1) Concrete
- (2) Bituminous (asphalt)
- (3) Brick or block
- (4) Slag, gravel, or stone
- (5) Dirt
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

25. Roadway Surface Condition 2

- (1) Dry
- (2) Wet
- (3) Snow or slush
- (4) Ice
- (5) Sand, dirt, or oil
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

26. Light Conditions 2

- (1) Daylight
- (2) Dark
- (3) Dark, but lighted
- (4) Dawn
- (5) Dusk
- (9) Unknown

27. Atmospheric Conditions 1

- (0) No adverse atmospheric-related driving conditions
- (1) Rain
- (2) Sleet/hail
- (3) Snow
- (4) Fog
- (5) Rain and fog
- (6) Sleet and fog
- (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_
- (9) Unknown

28. Traffic Control Device 0

- (0) No traffic control(s)
- (1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign
- (3) Yield sign
- (4) School zone sign
- (5) Other regulatory sign (specify): \_\_\_\_\_

- (6) Warning sign (not RR crossing)
- (7) Unknown sign
- (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 0

- (0) No traffic control device
- (1) Traffic control device not functioning (specify): \_\_\_\_\_
- (2) Traffic control device functioning properly
- (9) Unknown

## PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving 01  
 (Prior To Recognition Of Critical Event)  
 (00) No driver present  
 (01) Attentive or not distracted  
 (02) Looked but did not see
- Distractions*  
 (03) By other occupant(s), (specify): \_\_\_\_\_  
 (04) By moving object in vehicle (specify): \_\_\_\_\_  
 (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_  
 (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_  
 (07) While adjusting climate controls \_\_\_\_\_  
 (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_  
 (09) While using other device/object in vehicle (specify): \_\_\_\_\_  
 (10) Sleepy or fell asleep \_\_\_\_\_  
 (11) Distracted by outside person, object, or event (specify): \_\_\_\_\_  
 (12) Eating or drinking \_\_\_\_\_  
 (13) Smoking related \_\_\_\_\_  
 (97) Distracted/inattentive, details unknown \_\_\_\_\_  
 (98) Other, distraction (specify): \_\_\_\_\_  
 (99) Unknown \_\_\_\_\_
31. Pre-Event Movement (Prior to Recognition of Critical Event) 01  
 (00) No driver present  
 (01) Going straight  
 (02) Decelerating in traffic lane  
 (03) Accelerating in traffic lane  
 (04) Starting in traffic lane  
 (05) Stopped in traffic lane  
 (06) Passing or overtaking another vehicle  
 (07) Disabled or parked in travel lane  
 (08) Leaving a parking position  
 (09) Entering a parking position  
 (10) Turning right  
 (11) Turning left  
 (12) Making a U-turn  
 (13) Backing up (other than for parking position)  
 (14) Negotiating a curve  
 (15) Changing lanes  
 (16) Merging  
 (17) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify): \_\_\_\_\_  
 (99) Unknown \_\_\_\_\_
32. Critical Precrash Event 54  
*This Vehicle Loss of Control Due To:*  
 (01) Blow out or flat tire  
 (02) Stalled engine  
 (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_  
 (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_  
 (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_  
 (06) Traveling too fast for conditions \_\_\_\_\_  
 (08) Other cause of control loss (specify): \_\_\_\_\_  
 (09) Unknown cause of control loss \_\_\_\_\_

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane  
 (11) Over the lane line on right side of travel lane  
 (12) Off the edge of the road on the left side  
 (13) Off the edge of the road on the right side  
 (14) End departure  
 (15) Turning left at intersection  
 (16) Turning right at intersection  
 (17) Crossing over (passing through) intersection  
 (18) This vehicle decelerating  
 (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Other vehicle stopped  
 (51) Traveling in same direction with lower steady speed  
 (52) Traveling in same direction while decelerating  
 (53) Traveling in same direction with higher speed  
 (54) Traveling in opposite direction  
 (55) In crossover  
 (56) Backing  
 (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line  
 (61) From adjacent lane (same direction)—over right lane line  
 (62) From opposite direction—over left lane line  
 (63) From opposite direction—over right lane line  
 (64) From parking lane  
 (65) From crossing street, turning into same direction  
 (66) From crossing street, across path  
 (67) From crossing street, turning into opposite direction  
 (68) From crossing street, intended path not known  
 (70) From driveway, turning into same direction  
 (71) From driveway, across path  
 (72) From driveway, turning into opposite direction  
 (73) From driveway, intended path not known  
 (74) From entrance to limited access highway  
 (78) Encroachment by other vehicle—details unknown

*Pedestrian, Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway  
 (81) Pedestrian approaching roadway  
 (82) Pedestrian—unknown location  
 (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_  
 (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_  
 (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway  
 (88) Animal approaching roadway  
 (89) Animal—unknown location  
 (90) Object in roadway  
 (91) Object approaching roadway  
 (92) Object—unknown location  
 (98) Other critical precrash event (specify): \_\_\_\_\_  
 (99) Unknown \_\_\_\_\_

## 33. Attempted Avoidance Maneuver

09

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

## 34. Pre-Impact Stability

1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Pre-crash stability unknown

## 35. Pre-Impact Location

1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

## 36. Accident Type

52

(Note: Applicable codes on back of this page)

- (00) No impact *other vehicle traveling in opposite direction in this vehicle's travel lane*
- Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**



Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A. Right Roadside Departure	01 DRIVE OFF ROAD	02 CONTROL/ TRACTION LOSS	03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	06 DRIVE OFF ROAD	07 CONTROL/ TRACTION LOSS	08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	11 PARKED VEH.	12 STA. OBJECT	13 PEDESTRIAN/ ANIMAL	14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D. Rear-End	20 STOPPED 21, 22, 23	22 21 23	24 SLOWER 26, 28, 27	25 26 27	28 29 30 31 (EACH - 32) (EACH - 33) SPECIFICS OTHER SPECIFICS UNKNOWN
	E. Forward Impact	34 CONTROL/ TRACTION LOSS	35 CONTROL/ TRACTION LOSS	36 CONTROL/ TRACTION LOSS	37 AVOID COLLISION WITH VEH.	38 AVOID COLLISION WITH OBJECT (EACH - 42) (EACH - 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F. Sideswipe Angle	44 45	46 47	48 49	(EACH - 48) SPECIFICS OTHER	(EACH - 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G. Head-On	50 LATERAL MOVE	51 (EACH - 52) SPECIFICS OTHER	(EACH - 53) SPECIFICS UNKNOWN		
	H. Forward Impact	54 CONTROL/ TRACTION LOSS	55 CONTROL/ TRACTION LOSS	56 CONTROL/ TRACTION LOSS	57 AVOID COLLISION WITH VEH.	58 AVOID COLLISION WITH OBJECT (EACH - 62) (EACH - 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I. Sideswipe Angle	64 LATERAL MOVE	65 (EACH - 66) SPECIFICS OTHER	(EACH - 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	68 INITIAL OPPOSITE DIRECTIONS	69 INITIAL SAME DIRECTIONS	70 71	72 73	(EACH - 74) (EACH - 75) SPECIFICS OTHER SPECIFICS UNKNOWN
	K. Turn Into Path	74 TURN INTO SAME DIRECTION	75 TURN INTO OPPOSITE DIRECTIONS	76 77	78 79	(EACH - 84) (EACH - 85) SPECIFICS OTHER SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	80 81	82 83	(EACH - 90) SPECIFICS OTHER	(EACH - 91) SPECIFICS UNKNOWN	
VI Miscellaneous	M. Backing Etc	84 BACKING VEH.	85 OTHER VEH. OR OBJECT	86 87	88 89	90 Other Accident Type 91 Unknown Accident Type 00 No Impact

## OCCUPANT RELATED

37. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
38. Number of Occupants This Vehicle 0 4  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
39. Number of Occupant Forms Submitted 0 4

## AIR BAG RELATED

40. Is this an AOPS Vehicle? 1  
(0) No (includes unknown)  
(1) Yes - researcher determined  
(2) VIN determined air bag system  
(3) VIN determined automatic (passive) belts  
(4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6  
(0) Not equipped or not available  
(1) No air bags deployed  
*Single Air Bag Vehicle*  
(2) Driver air bag deployed  
(3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
(4) Driver side only deployed  
(5) Passenger side only deployed  
(6) Driver and passenger side deployed  
(7) Driver and passenger side unknown if deployed  
(8) Air bag(s) deployed, details unknown  
(9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
(0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

## VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight \_\_\_\_\_ 0  
Code weight to nearest 10 kilograms.  
(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown  
\_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs  
Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0 0 0  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown  
\_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

Source: veh inspection

## ROLLOVER DATA

45. Rollover 0 0  
(00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
(01-16) Code the number of quarter turns  
(17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
(99) Rollover (overturn), details unknown
46. Rollover Initiation Type 0 0  
(00) No rollover  
(01) Trip-over  
(02) Flip-over  
(03) Turn-over  
(04) Climb-over  
(05) Fall-over  
(06) Bounce-over  
(07) Collision with another vehicle  
(08) Other rollover initiation type specify: \_\_\_\_\_  
(98) Rollover--end-over-end  
(99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
(0) No rollover  
(1) On roadway  
(2) On shoulder--paved  
(3) On shoulder--unpaved  
(4) On roadside or divided trafficway median  
(8) Rollover--end-over-end  
(9) Unknown
48. Rollover Initiation Object Contacted 0 0  
(Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
(0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify): \_\_\_\_\_  
(6) Non-contact rollover forces (specify): \_\_\_\_\_  
(8) Rollover--end-over-end  
(9) Unknown
50. Direction of Initial Roll 0  
(0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(8) Rollover--end-over-end  
(9) Unknown roll direction

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*

- (1) 1st CDC
- (2) 2nd CDC
- (3) Other not automated CDC (specify): \_\_\_\_\_

*Underride (see specific CDC)**[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]*

- (4) 1st CDC
- (5) 2nd CDC
- (6) Other not automated CDC (specify): \_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)
- (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value

- (997) Noncollision
- (998) Impact with object
- (999) Unknown

53. Heading Angle For This Vehicle 000
54. Heading Angle For Other Vehicle 180

## RECONSTRUCTION DATA

55. Towed Trailing Unit 0
- (0) No towed unit
- (1) Yes—towed trailing unit
- (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No
- (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
- (1) Not damaged
- (2) Cracked/sheared
- (3) Tilted < 45 degrees
- (4) Tilted ≥ 45 degrees
- (5) Uprooted tree
- (6) Separated pole from base
- (7) Pole replaced
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS  
HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 02

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program -damage only routine
- (02) Reconstruction program -damage and trajectory routine
- (03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover
- (06) Other non-horizontal forces
- (07) Sideswipe type damage
- (08) Severe override
- (09) Yielding object
- (10) Overlapping damage
- (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify): \_\_\_\_\_

- (98) Other, (specify): \_\_\_\_\_

## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

0 5 2

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

60. Longitudinal Component of Delta V

Highest  
0 0 5 2

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than  
 -0.5 kmph and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (\_999) Unknown

61. Lateral Component of Delta V

Highest  
- 0 0 0

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: \_\_000 means greater than -0.5 kmph  
 and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (\_999) Unknown

62. Energy Absorption

1 7 7, 5 0 0

\_\_\_\_ Nearest 100 joules (highest)

\_\_\_\_ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
 (9997) 999,650 joules or more  
 (9999) Unknown

63. Impact Speed

Highest

0 4 1

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (998) Trajectory algorithm not run  
 (999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

1

- (0) No reconstruction  
 (1) Collision fits model — results appear reasonable  
 (2) Collision fits model — results appear high  
 (3) Collision fits model — results appear low  
 (4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

0 5 2

\_\_\_\_ Nearest kmph (highest)

\_\_\_\_ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

IS MISSING VEHICLE ALGORITHM APPLICABLE FOR THIS VEHICLE? ☐ YES ☐ NOIF YES: IS A COMPLETED PROGRAM SUMMARY INCLUDED? ☐ YES ☐ NO



ESTIMATED DELTA V	VEHICLE INSPECTION
<p>66. Estimated Highest Delta V (Researcher Determined) <u>0</u></p> <p>(0) Reconstruction Delta V coded</p> <p><i>Estimated Delta V</i></p> <p>(1) Less than 10 kmph</p> <p>(2) <math>\geq 10</math> kmph but <math>&lt; 25</math> kmph</p> <p>(3) <math>\geq 25</math> kmph but <math>&lt; 40</math> kmph</p> <p>(4) <math>\geq 40</math> kmph but <math>&lt; 55</math> kmph</p> <p>(5) <math>\geq 55</math> kmph</p> <p><i>Other estimates of damage severity</i></p> <p>(6) Minor</p> <p>(7) Moderate</p> <p>(8) Severe</p> <p>(9) Unknown</p>	<p>67. Type of Vehicle Inspection <u>3</u></p> <p>(0) No inspection</p> <p>(1) Vehicle fully repaired-no damage evident</p> <p>(2) Partial inspection (specify):</p> <p>(3) Complete inspection</p>

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	

## VEHICLE IDENTIFICATION

VIN 1B3HD46T3RF (Serial# omitted) Built 6-94  
Model Year 94  
Vehicle Make (specify): Dodge Vehicle Model (specify): Intrepid

## LOCATOR

**Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.**

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	Entire frontal Plane	Entire frontal Plane	C6

### CRUSH PROFILE IN CENTIMETERS

**NOTES:** Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

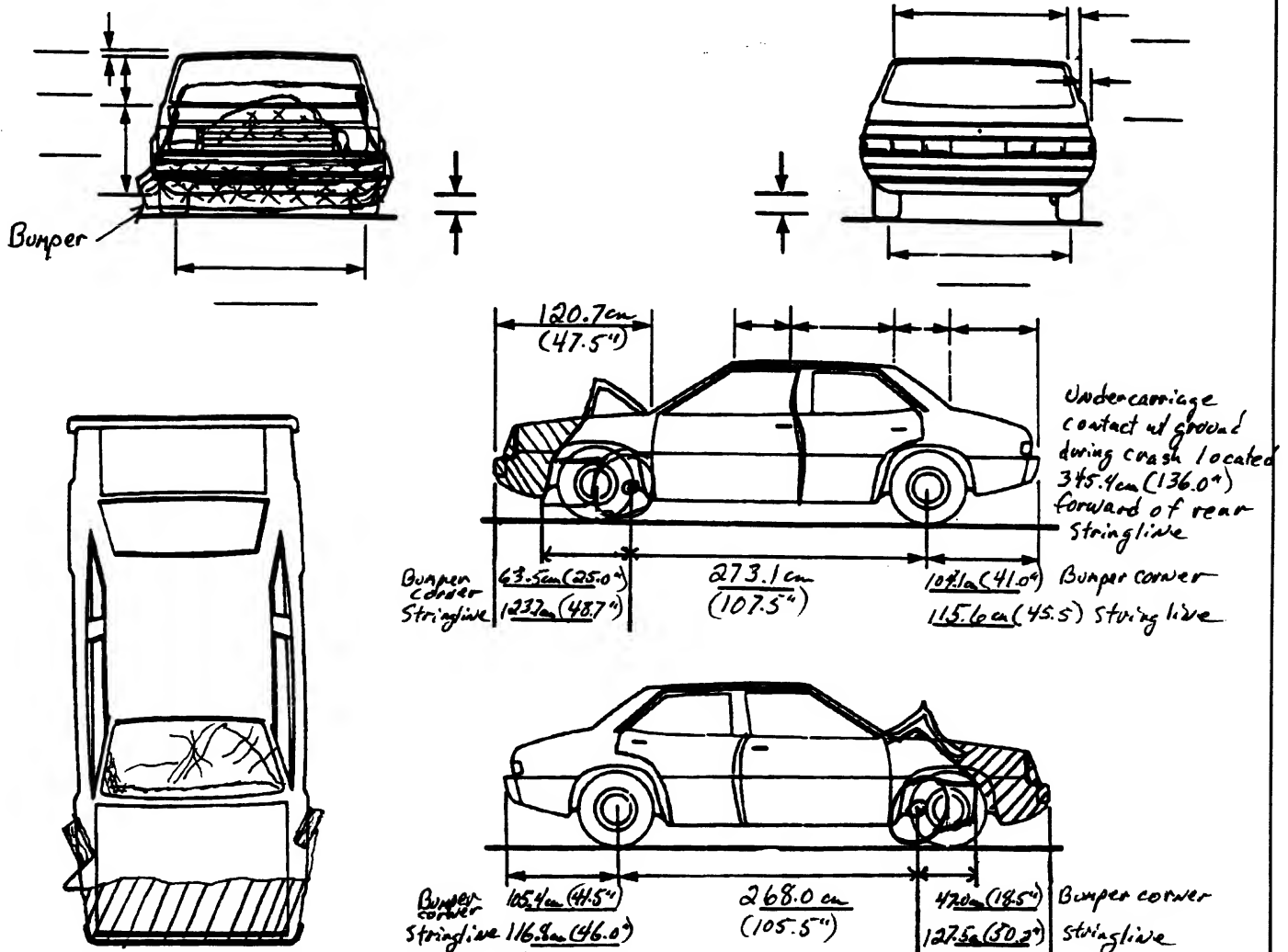
Use as many lines/columns as necessary to describe each damage profile.

[illegible]

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>1</u> LF <u>1</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		<b>b. Tire deflated</b> RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>(113") 287.0</u> cm Overall Length <u>(201.7") 512.3</u> cm Maximum Width <u>(74.4") 189.0</u> cm Curb Weight <u>(3271 lb) 1,484</u> kg Average Track <u>(62.0") 157.5</u> cm Front Overhang <u>(42.7") 108.5</u> cm Rear Overhang <u>(46.0") 116.8</u> cm Undeformed End Width <u>(61.0") 154.9</u> cm Engine Size: cyl./displ. <u>3.3</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF <u>2</u> ° LF <u>0</u> ° RR <u>±</u> ° LR <u>±</u> ° Within ± 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Downward</i>				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD			
				Approximate Cargo Weight <u>None</u> kg			

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.





## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>52</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>155</u> (61.0")	<u>046</u> (18.0")	<u>064</u> (25.1")	<u>056</u> (21.9")	<u>055</u> (21.8")	<u>060</u> (23.8")	<u>067</u> (26.5")	<u>+ - 000</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
_____	_____	_____	_____	_____	_____	_____	<u>+ -</u>

## 26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

155

## 27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

132  
(52.0")

## 28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

287

## 29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

158

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

0

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

0

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

### FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

0

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

0

- (9) Unknown

### FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap

3

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank

- (1) On back plane

- (2) Aft of center of the rear wheels (rear axle)  
on left side plane

- (3) Aft of center of the rear wheels (rear axle)  
on right side plane

- (4) Forward of center of the rear wheels (rear  
axle) on left side plane

- (5) Forward of center of the rear wheels (rear  
axle) on right side plane

- (6) Over the center of the rear wheels (rear  
axle) on left side plane

- (7) Over the center of the rear wheels (rear  
axle) on right side plane

- (8) Other (specify): \_\_\_\_\_

- (9) Unknown

37. Type of Fuel Tank-1

2

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)

- (1) Metallic

- (2) Non-metallic

- (9) Unknown

39. Location of Fuel Tank-1

7

40. Location of Fuel Tank-2

0

- (0) No fuel tank

- (1) Aft of center of the rear wheels (rear axle)  
centered

- (2) Aft of center of the rear wheels (rear axle)  
left side

- (3) Aft of center of the rear wheels (rear axle)  
right side

- (4) Forward of center of the rear wheels (rear  
axle) centered

- (5) Forward of center of the rear wheels (rear  
axle) left side

- (6) Forward of center of the rear wheels (rear  
axle) right side

- (7) Over center of the rear wheels (rear axle)

- (8) Other (specify): \_\_\_\_\_

- (9) Unknown

*W/ majority forward of  
rear wheels*

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

0

- (0) No fuel tank

- (1) No damage to fuel tank

- (2) Deformed, no seam failure

- (3) Deformed, with a seam failure

- (4) Punctured

- (5) Lacerated (ripped)

- (6) Abraded (scraped)

- (7) Filler neck separation from the fuel tank

- (8) Other damage (specify): \_\_\_\_\_

- (9) Unknown

43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

0

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1

0 1

46. Fuel Type-2

0 0*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

## INTEGRITY

4. Passenger Compartment Integrity

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 3 7. LR 1 8. RR 1 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch  
Opening in Collision. If IV05-IV09  $\neq$  2, Then code 010. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail,  
etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 220. BL 2 21. Roof 0 22. Other 0

(0) No glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted (original)

(4) AS-2 - Tempered-with after market tint

(5) AS-3 - Tempered-tinted (with additional after market tint)

(6) AS-14 - Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 228. BL 1 29. Roof 0 30. Other 0

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 2 32. LF 1 33. RF 1 34. LR 1 35. RR 136. BL 1 37. Roof 0 38. Other 0

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from  
impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 144. BL 1 45. Roof 0 46. Other 0

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant  
contact and not holed by occupant contact(6) Glazing out-of-place by occupant contact and holed by  
occupant contact

(7) Glazing removed prior to accident

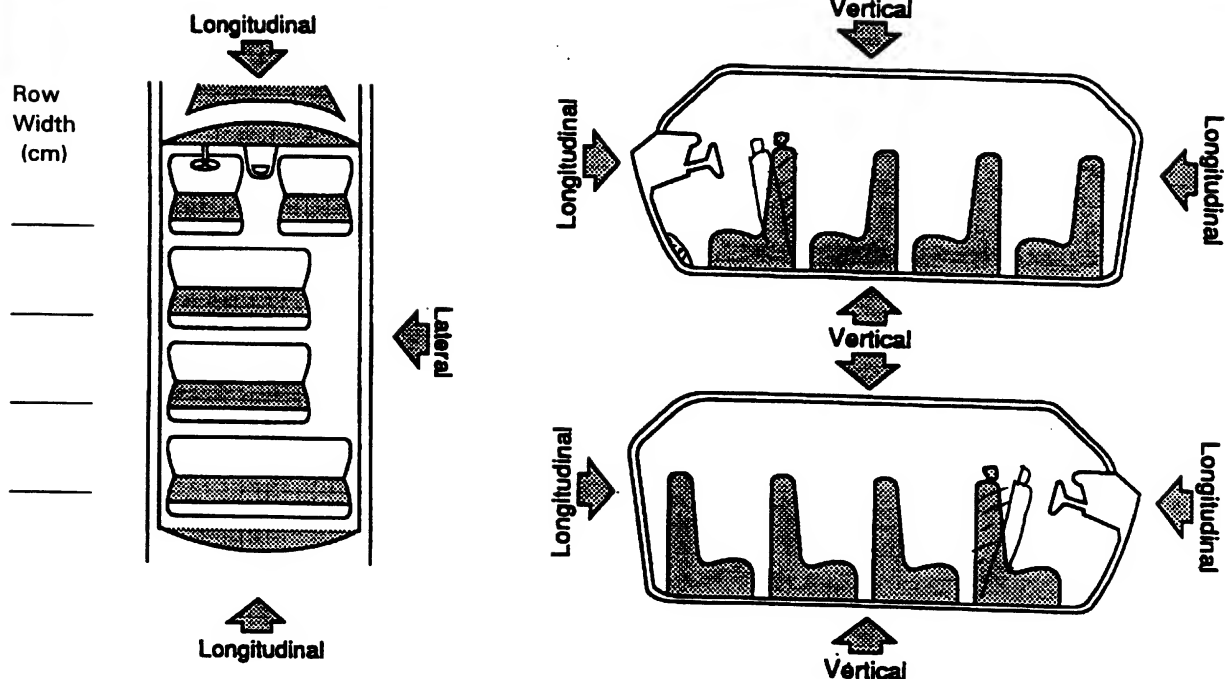
(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant



# INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
11	Toe Pad - Adjacent to other foot rest pad	114.9cm (45.25")	95.3 (37.5")	= 19.6 cm (7.7")	Long
11	Seat back Support	-	-	= 15.2 cm (6.0")	Long
12	Driver Instrument Panel, lower edge of console, (center console)	67.3cm (26.5")	63.8 cm (25.125")	= 3.5 cm (1.4")	Long
13	Toe Pad @ base of console	105.4cm (41.5")	77.5cm (30.5")	= 27.9 cm (11.0")	Long
13	Seat back Support	-	-	= 25.4 cm (10.0")	Long
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	
		-	-	=	

Document no more than the 15 most severe intrusions

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

*Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## LOCATION OF INTRUSION

## Front Seat

- (11) Left
- (12) Middle
- (13) Right

## Second Seat

- (21) Left
- (22) Middle
- (23) Right

## Third Seat

- (31) Left
- (32) Middle
- (33) Right

## Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>13</u>	48. <u>20</u>	49. <u>3</u>	50. <u>2</u>
2nd	51. <u>13</u>	52. <u>05</u>	53. <u>3</u>	54. <u>2</u>
3rd	55. <u>11</u>	56. <u>05</u>	57. <u>3</u>	58. <u>2</u>
4th	59. <u>11</u>	60. <u>20</u>	61. <u>3</u>	62. <u>2</u>
5th	63. <u>12</u>	64. <u>03</u>	65. <u>1</u>	66. <u>2</u>
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## STEERING COLUMN

87. Steering Column Type 2

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

88. Tilt Steering Column Adjustment 1

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

89. Telescoping Steering Column Adjustment 0

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

90. Steering Rim/Spoke Deformation 00

Code actual measured

- deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 00

(00) No steering rim deformation

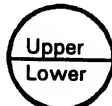
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## INSTRUMENT PANEL

92. Odometer Reading 009,000

\_\_\_\_\_ kilometers

Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

5,421 miles X 1.6093 = 8,724 kilometers

Source: \_\_\_\_\_

93. Instrument Panel Damage from Occupant Contact? 1

- (0) No  
 (1) Yes  
 (9) Unknown

94. Type of Knee Bolster Covering 2

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 2

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 1

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

97. Adaptive (Assistive) Driving Equipment 0

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed (Check all that apply.)

- ☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_

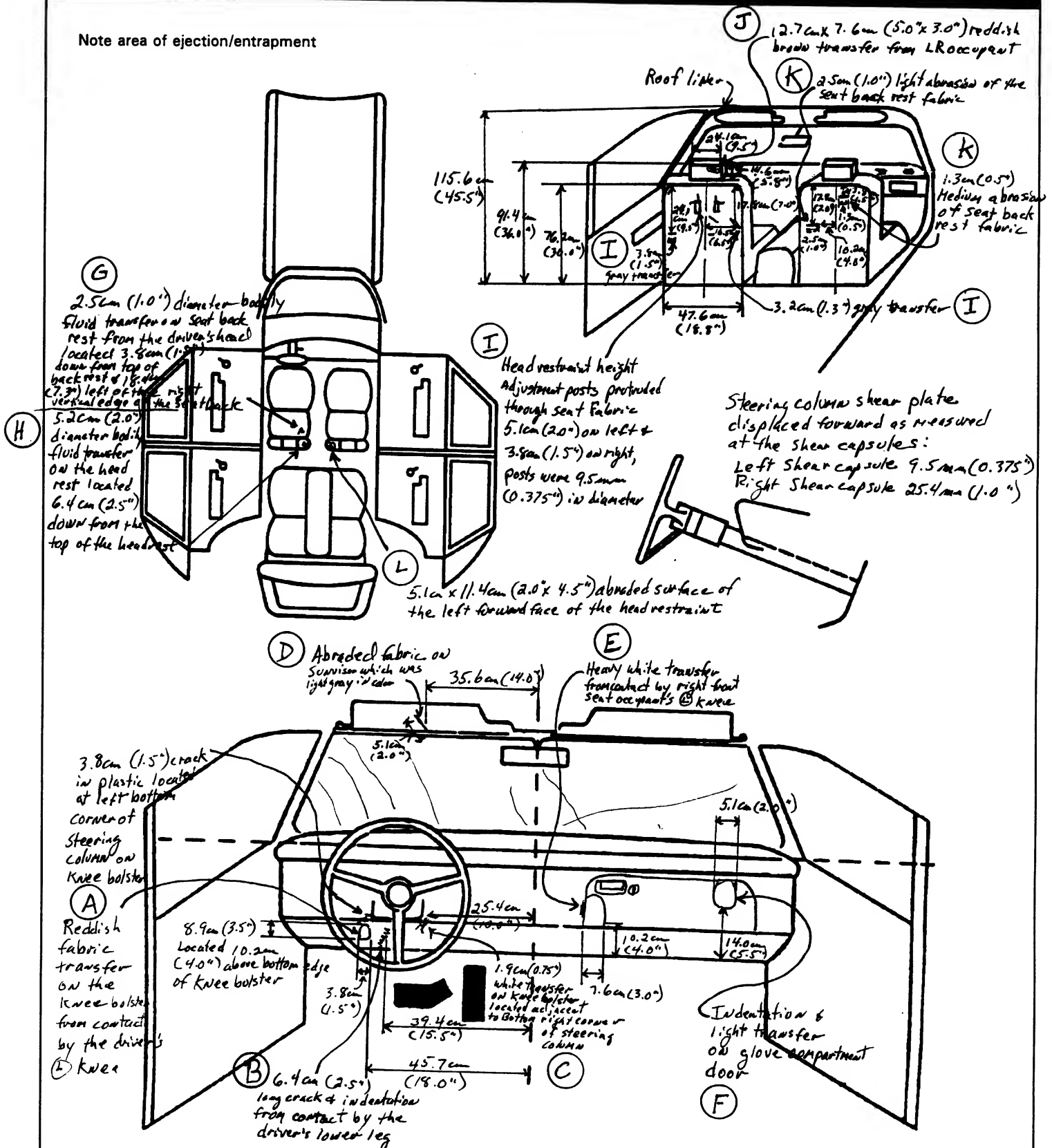
☐ Additional or relocated switches (specify): \_\_\_\_\_

- ☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.



## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	014	01	(L) Knee	Reddish fabric transfer	1
B	014	01	(L) Lower leg	6.4 cm (2.5") long crack	1
C	014	01	(R) Knee	1.9 cm (0.75") white transfer	2
D	003	03	(R) Hand	5.1 cm (2.0") long abraded fabric	3
E	012/013	02	(L) Knee	Heavy white abrasion/transfer	1
F	013	02	(R) Knee	Indentation & light transfer	1
G	151	01	Head	Body fluid drip just under transfer on headrest	1
H	155	01	Head	Body fluid transfer on the forehead face	1
I	151	03	Hips/torso	Protrusion of head restraint adjustment posts/gray transfers	1
J	155	03	Upper torso	Reddish brown transfer	1
K	151	04	Upper torso	2 abraded surfaces	1
L	155	04	Head	5.1 cm x 11.4 cm abraded surface	1
M					
N					

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## CODES FOR INTERIOR COMPONENTS

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify)  
 (195) Other air bag compartment cover (specify)

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form. If a Child safety seat is present, encode the data on the back of this page. If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	/	4
	Evidence of usage	04		04
	Used in this crash?	04 - Heavy fabric transfer		04 - Heavy fabric transfer
	Proper Use	1		1
	Failure Modes	1		1
	Anchorage Adjustment	2		2
SECOND	Availability	4	3	4
	Evidence of usage	04	00	04
	Used in this crash?	00	00	00
	Proper Use	0	0	0
	Failure Modes	0	0	0
	Anchorage Adjustment	1	0	1
OTHER	Availability	/	/	/
	Evidence of usage			
	Used in this crash?			
	Proper Use			
	Failure Modes			
	Anchorage Adjustment			

## Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

## Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):
- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

## Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):
- (9) Unknown

## Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

## Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

# FIRST SEAT FRONTAL AIR BAGS

**NOTES:** Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
Type of air bag?	1	1
Flaps open at tear points?	2	2
Flaps damaged?	1	1
Air bag damaged?	01	01
Source of air bag damage	01	01
Air bag tethered?	2 - 2 tethers located at the 3 & 9 o'clock positions	2 - 1 large tether located 22.9" (9.0") above center
Air bag have vent ports?	1	1
Other occupant contact air bag?	1	1
Occupant wearing eyewear?	2	2

## Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**AUTOMATIC RESTRAINTS**

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**AIR BAGS**

		Left Front	Right Front	Other
<b>F I R S T</b>	Availability/Function	/	/	0
	Deployment	/	/	0
	Failure	/	/	0

**Air Bag System Availability/Function**

- (0) Not equipped/not available  
(1) Air bag

**Non-functional**

- (2) Air bag disconnected (specify):  
\_\_\_\_\_  
(3) Air bag not reinstalled  
(9) Unknown

**Are There Indications of Air Bag System Failure? (This Occupant Position)**

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(9) Unknown

**Frontal Air Bag System Deployment (This Occupant Position)**

- (0) Not equipped/not available  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, accident sequence undetermined  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

**Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)**

- (0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

**AUTOMATIC BELTS**

		Left	Right
<b>F I R S T</b>	Availability/Function	0	0
	Use	/	/
	Type	/	/
	Proper Use	/	/
	Failure Modes	/	/

**Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

**Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

**Automatic (Passive) Belt System Type**

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

**Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
\_\_\_\_\_  
(8) Other improper use of automatic belt system (specify):  
\_\_\_\_\_  
(9) Unknown

**Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify):  
\_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify):  
(8) Other automatic belt failure (specify):  
\_\_\_\_\_  
(9) Unknown

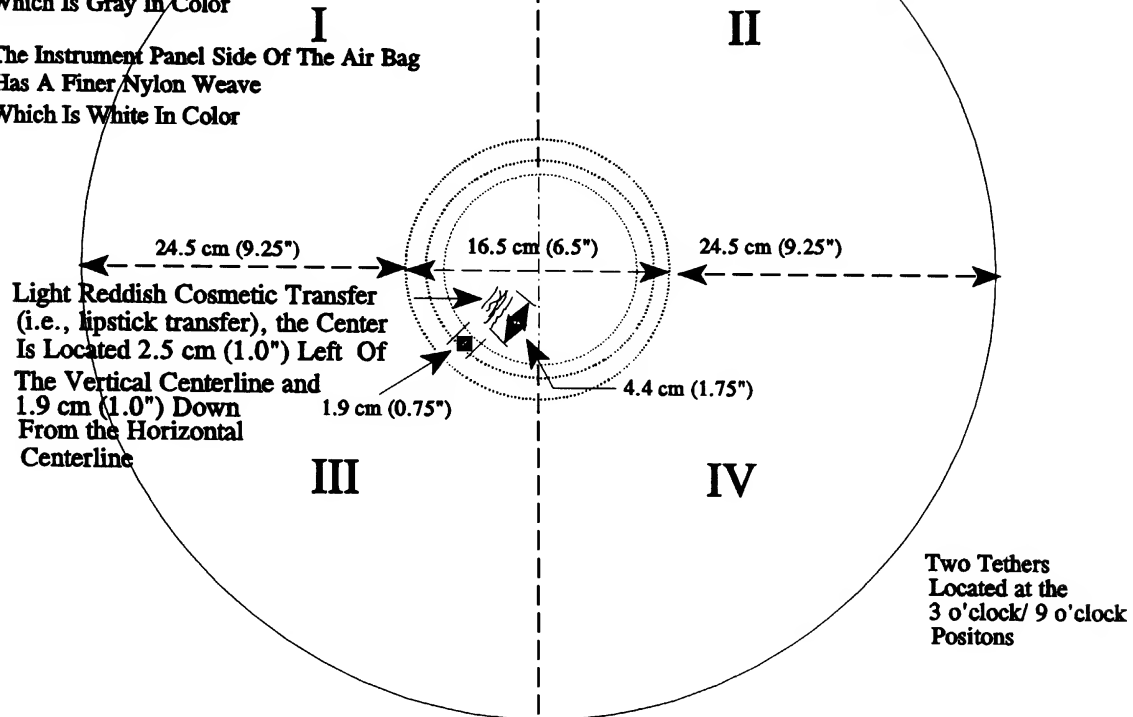


Porous Air Bag Fabric  
No Vent Ports

Front Surface Fabric Of The Air Bag  
Has a Semi Coarse  
Rip Stop Nylon Weave  
Which Is Gray In Color

The Instrument Panel Side Of The Air Bag  
Has A Finer Nylon Weave  
Which Is White In Color

Air Bag Identification No.



Tethered Driver Side Air Bag of Vehicle #2

## DRIVER AIR BAG SKETCHES (Cont'd)

### 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

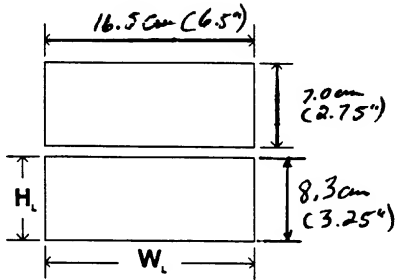
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

height ( $H_L$ ) \_\_\_\_\_

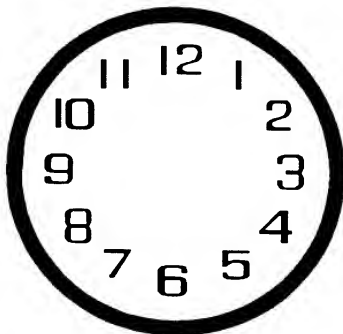


### 4. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

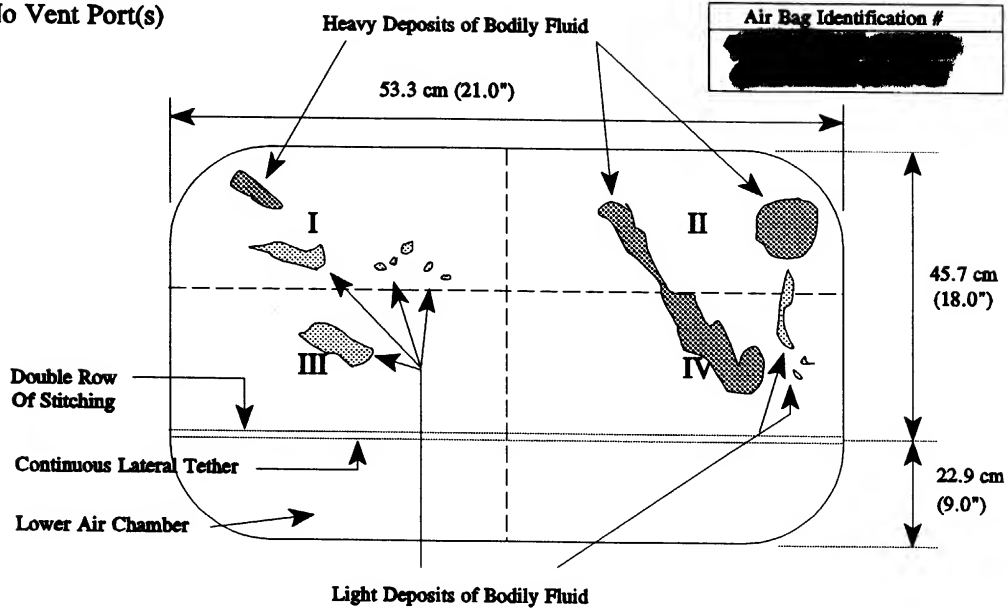
### 5. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 6. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS

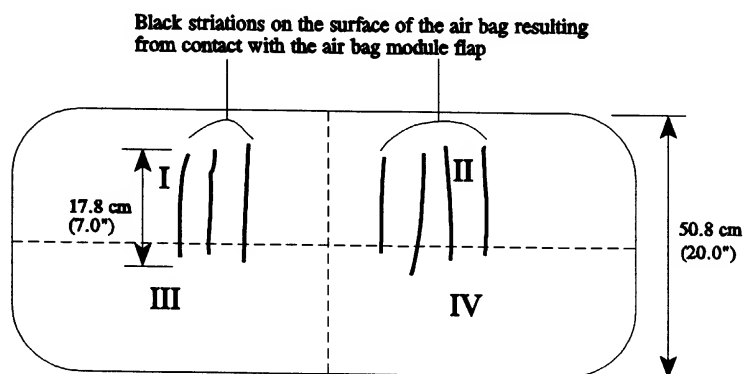
*No Vent Ports*



Porous Rip Stop Nylon Fabric  
No Vent Port(s)



## Passenger Side Air Bag of Vehicle #2



## Instrument Panel Side (Rear) of the Passenger Side Air Bag of Vehicle #2

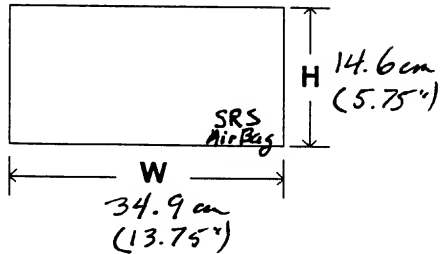
# PASSENGER AIR BAG SKETCHES (Cont'd)

## 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

a. Flap thickness = 11.1mm (0.44")

width (W) \_\_\_\_\_

height (H) \_\_\_\_\_



## 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

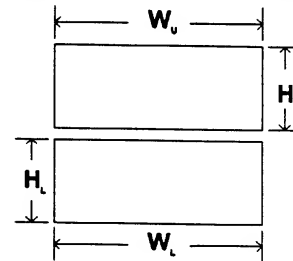
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

height ( $H_L$ ) \_\_\_\_\_

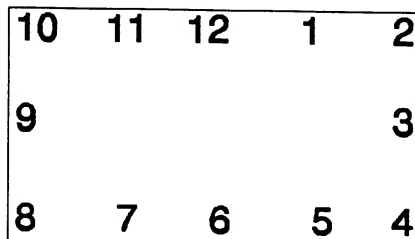


## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

## 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS

No Vent Port





**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

## HEAD RESTRAINTS/SEAT EVALUATION

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3 (Adj. to Down Position)	/	3 (Adj. to Down Position)
	Seat Type	01		01
	Seat Performance	05		05
	Seat Orientation	1		1
	Seat Track Position	Seat Jammed 3		Seat Jammed 3
	Seat Back Incline Pre/Post Impact	10° rearward of Vertical		10° rearward of Vertical
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
	Seat Track Position	01	01	01
	Seat Back Incline Pre/Post Impact	01	01	01
THIRD	Head Restraint Type/Damage	/	/	/
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
	Seat Track Position	/	/	/
	Seat Back Incline Pre/Post Impact	/	/	/
OTHER	Head Restraint Type/Damage	/	/	/
	Seat Type	/	/	/
	Seat Performance	/	/	/
	Seat Orientation	/	/	/
	Seat Track Position	/	/	/
	Seat Back Incline Pre/Post Impact	/	/	/

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

## HEAD RESTRAINTS/SEAT EVALUATION

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

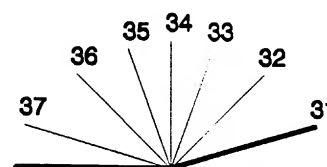
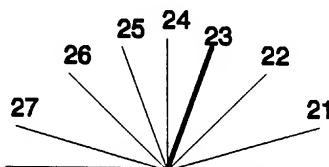
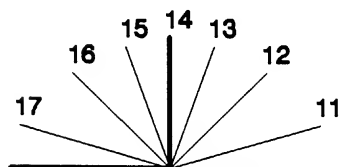
- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position
- (99) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [☒] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

**(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No [☒] Yes [ ]

Describe entrapment mechanism: \_\_\_\_\_

---



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Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)





## OCCUPANT ASSESSMENT FORM

Form Approved  
O.M.B. No. 2127-0021NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

95-08

3. Vehicle Number

02

4. Occupant Number

01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

66 inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999)Unknown

145 pounds X .4536 = 066 kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 1

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Shoulder Belt Upper Anchorage Adjustment 2

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable Shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use 1
- (0) None used
  - (1) Police did not indicate belt use
  - (2) Shoulder belt
  - (3) Lap belt
  - (4) Lap and shoulder belt
  - (5) Belt used, type not specified
  - (6) Child safety seat
  - (7) Automatic belt
  - (8) Other type belt, (specify): \_\_\_\_\_
  - (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2
- (0) No air bag available
  - (1) Police did not indicate air bag availability/function
  - (2) Deployed
  - (3) Not deployed
  - (4) Unknown if deployed
  - (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☐ Not equipped/not available/destroyed or rendered inoperative
  - ☒ Vehicle inspection
  - ☐ Official injury data
  - ☐ Driver/occupant interview
  - ☐ Other (specify): \_\_\_\_\_
  - ☐ Unknown if belt used
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System Availability/Function (This Occupant Position) 1
- (0) Not equipped/not available
  - (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify): \_\_\_\_\_
- (3) Air bag not reinstalled
- (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1
- (0) Not equipped/not available
  - (1) Deployed during accident (as a result of impact)
  - (2) Deployed inadvertently just prior to accident
  - (3) Deployed, details unknown
  - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
  - (5) Unknown if deployed
  - (7) Nondeployed
  - (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0
- (0) Not equipped/not available
  - (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled

- (9) Unknown

*Specify type of "other" air bag present:*

\_\_\_\_\_

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0
- (0) Not equipped with an "other" air bag
  - (1) Deployed during accident (as a result of impact)
  - (2) Deployed inadvertently just prior to accident
  - (3) Deployed, details unknown
  - (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
  - (5) Unknown if deployed
  - (7) Nondeployed
  - (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1
- (0) Not equipped/not available
  - (1) No
  - (2) Yes (specify): \_\_\_\_\_

- (9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

(0) Not equipped/not available

(1) No previous accidents

Yes

(2) Previous accident(s) without deployment(s)

(3) One previous accident with deployment

(4) More than one previous accident with at least one deployment

(8) Previous accidents, unknown deployment status

(9) Unknown

36. Type of Air Bag 1

(0) Not equipped/not available

(1) Original manufacturer installed system

(2) Retrofitted air bag

(3) Replacement air bag

(8) Unknown type of air bag

(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

(0) Not equipped/not available

(1) No prior maintenance

(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

(00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

(96) Deployed, unknown event

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

39. CDC For Air Bag Deployment Impact 1

(0) Not equipped/not available

(1) Highest delta V

(2) Second highest delta V

(3) Other non-coded delta V (specify): \_\_\_\_\_

(6) Deployed, unknown event

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

40. Longitudinal Component of

Delta V For Air Bag

Deployment Impact

(\_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(\_996) Deployment, unknown longitudinal Delta V

(\_997) Not deployed

(\_998) Unknown if deployed

(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

(0) Not equipped/not available

(1) No

(2) Yes

(3) Deployed, unknown if flap(s) opened at designated tear points

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(3) Deployed, unknown if air bag module cover flap(s) damaged

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

43. Was There Damage To The Air Bag? 01

(00) Not equipped/not available

(01) Not damaged

Yes - Air Bag Damage

(02) Ruptured

(03) Cut

(04) Torn

(05) Holed

(06) Burned

(07) Abraded

(88) Other damage (specify): \_\_\_\_\_

(95) Damaged, details unknown

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown



**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 0 1  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
Two tethers located at the 3/9 o'clock positions  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints *Down position*  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 1  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 3  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
*Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 2 3

(00) Occupant not seated or no seat

(01) Not adjustable

*Upright prior to impact**10° rearward of vertical position*

(11) Moved to completely rearward position

(12) Moved to rearward midrange position

(13) Moved to slightly rearward position

(14) Retained pre-impact position

(15) Moved to slightly forward position

(16) Moved to forward midrange position

(17) Moved to completely forward position

*Slightly reclined prior to impact*

(21) Moved to completely rearward position

(22) Moved to rearward midrange position

(23) Retained pre-impact position

(24) Moved to upright position

(25) Moved to slightly forward position

(26) Moved to forward midrange position

(27) Moved to completely forward position

*Completely reclined prior to impact*

(31) Retained pre-impact position

(32) Moved to rearward midrange position

(33) Moved to slightly rearward position

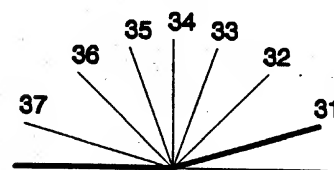
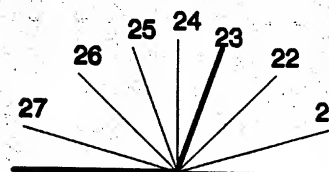
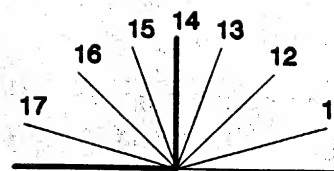
(34) Moved to upright position

(35) Moved to slightly forward position

(36) Moved to forward midrange position

(37) Moved to completely forward position

(99) Unknown



## 54. Seat Performance (this Occupant Position) \_\_\_\_\_

(0) Occupant not seated or no seat

(1) No seat performance failure(s)

(2) Seat adjusters failed

(3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_

(4) Seat track/anchors failed

(5) Deformed by impact of occupant

(6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 0  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify):  
 (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

- (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

- (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

- (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

- (01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

- (11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

- (21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)** 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality** 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)** 1

- (0) Not treated at a medical facility
- (1) Trauma center *Class 1*
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

**64. Hospital Stay** 21

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost** 00

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death 00  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

(99) Unknown

70. Number of Recorded Injuries for This Occupant \_\_\_\_\_

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score 15  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

72. Was the Occupant Given Blood? 9  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 96  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 1  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
1st	5. 2	6. 1	7. 9	8. 06	9. 00	10. 1	11. 6	12. 160	13. 1	14. 1	15. 00
2nd	16. 2	17. 2	18. 9	19. 02	20. 02	21. 1	22. 8	23. 170	24. 1	25. 1	26. 00
3rd	27. 2	28. 4	29. 5	30. 02	31. 30	32. 3	33. 1	34. 152	35. 1	36. 1	37. 00
4th	38. 2	39. 4	40. 4	41. 14	42. 06	43. 3	44. 1	45. 152	46. 1	47. 1	48. 00
5th	49. 2	50. 4	51. 9	52. 04	53. 02	54. 1	55. 2	56. 152	57. 1	58. 1	59. 00
6th	60. 2	61. 4	62. 9	63. 00	64. 02	65. 1	66. 0	67. 152	68. 1	69. 1	70. 00
7th	71. 2	72. 8	73. 5	74. 06	75. 02	76. 1	77. 2	78. 152	79. 1	80. 1	81. 00
8th	82. 2	83. 8	84. 5	85. 14	86. 00	87. 2	88. 1	89. 010	90. 1	91. 1	92. 00
9th	93. 2	94. 8	95. 5	96. 22	97. 00	98. 2	99. 2	100. 251	101. 1	102. 1	103. 03
10th	104. 2	105. 8	106. 5	107. 22	108. 00	109. 2	110. 1	111. 010	112. 1	113. 1	114. 00

[illegible]



## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen			(5) Anterior
(6) Spine		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure.	(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region

## Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes Muscles/Ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

## Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

## Head - LOC

- (02) Length of LOC

- (04) Level
- (06) of
- (08) Consciousness

- (10) Concussion

## Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

## Abbreviated Injury Scale

- (1) Minor Injury
- (2) Moderate Injury
- (3) Serious Injury
- (4) Severe Injury
- (5) Critical Injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

## SOURCE OF INJURY DATA

## OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

## UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

## INJURY SOURCE

## CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_
- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

## EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_

## (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_

- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_

- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

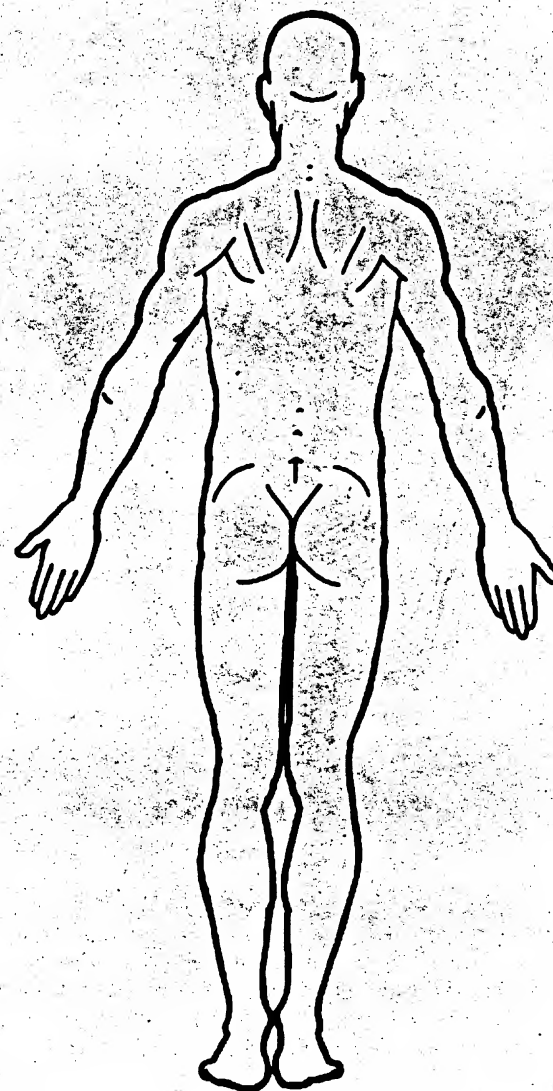
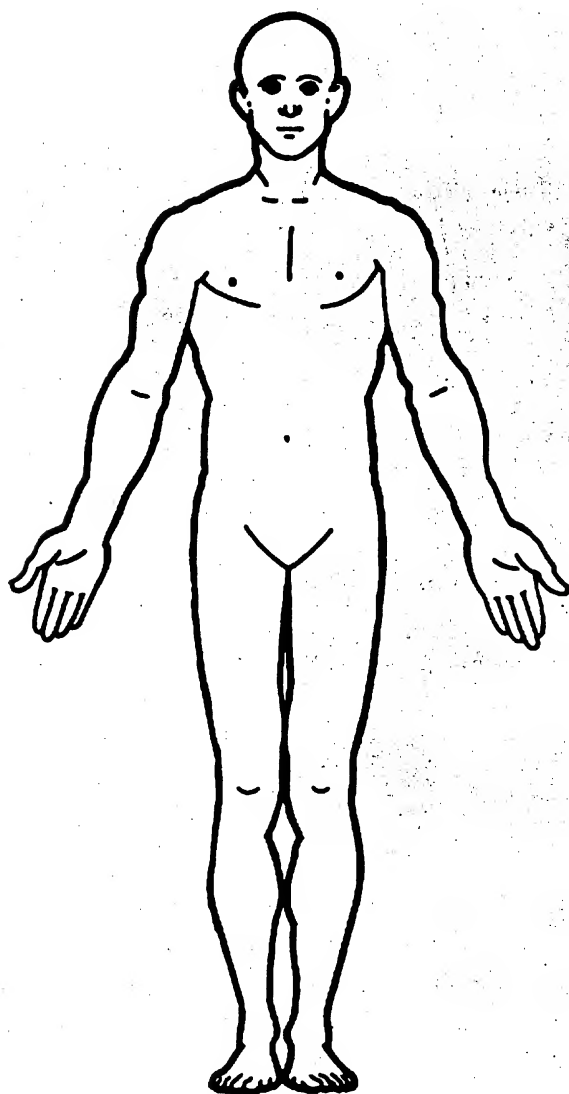
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

## NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

Arterial Blood  
Gases

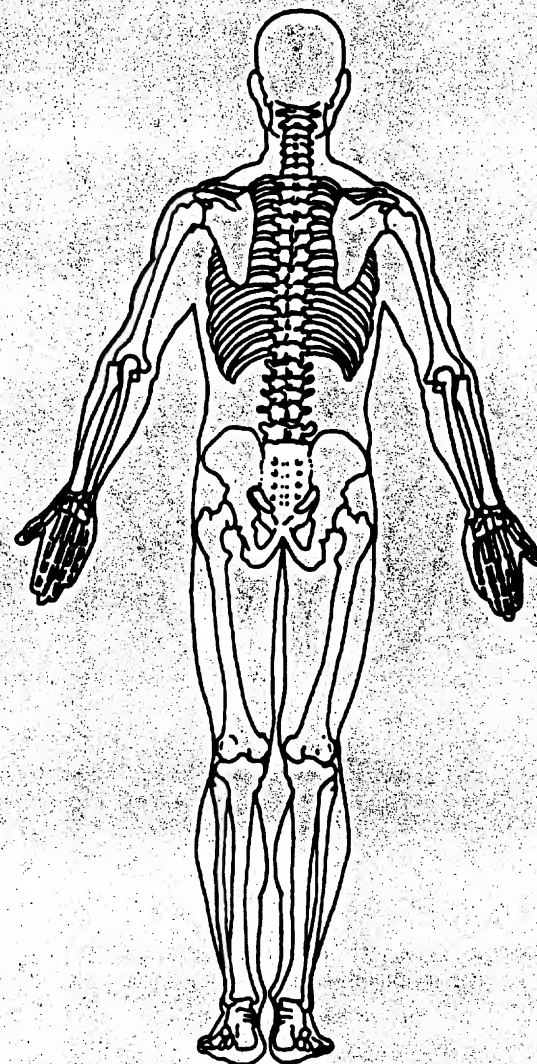
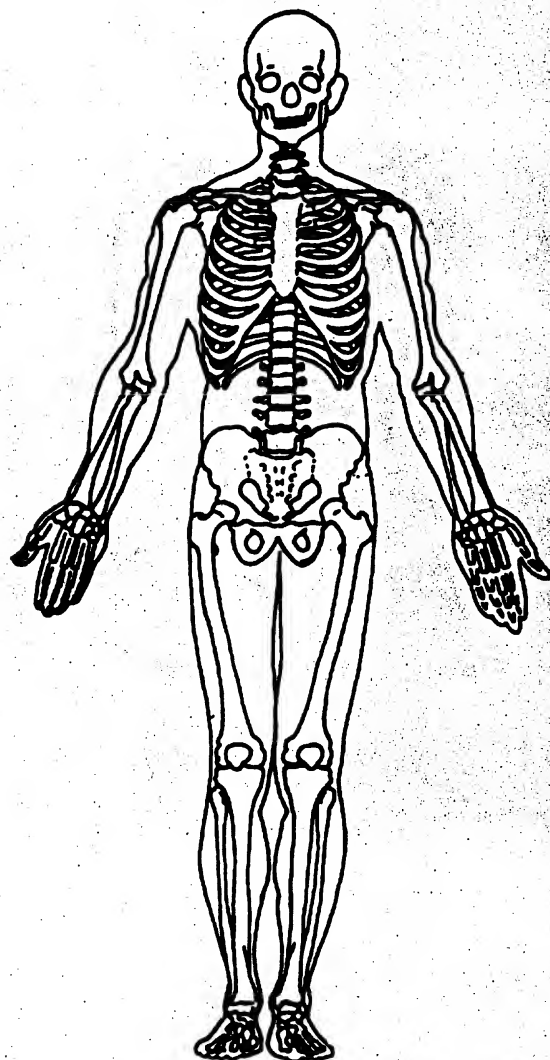
pH = \_\_\_

PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> = \_\_\_

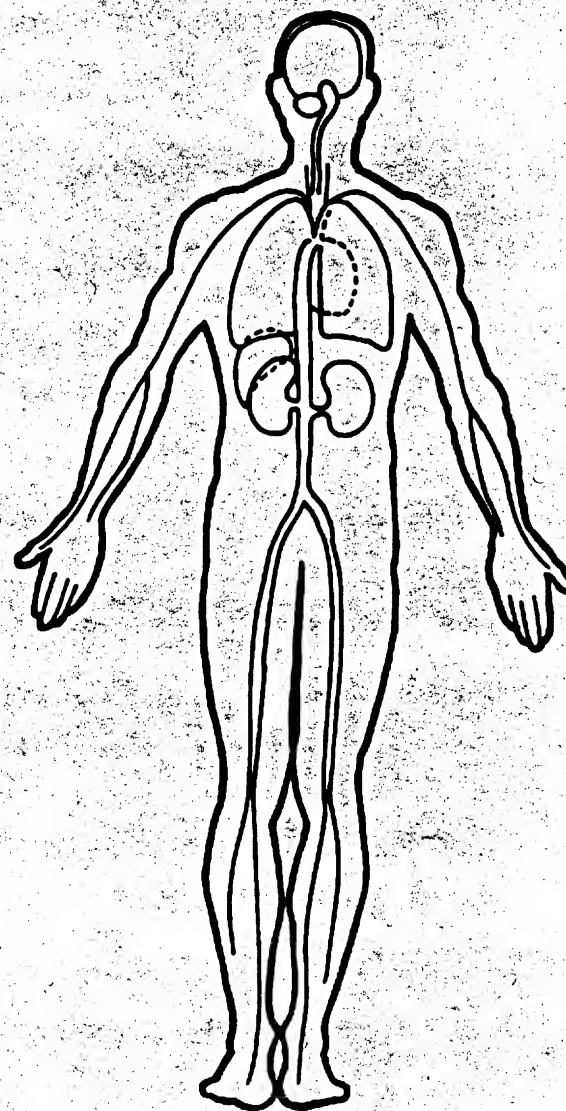
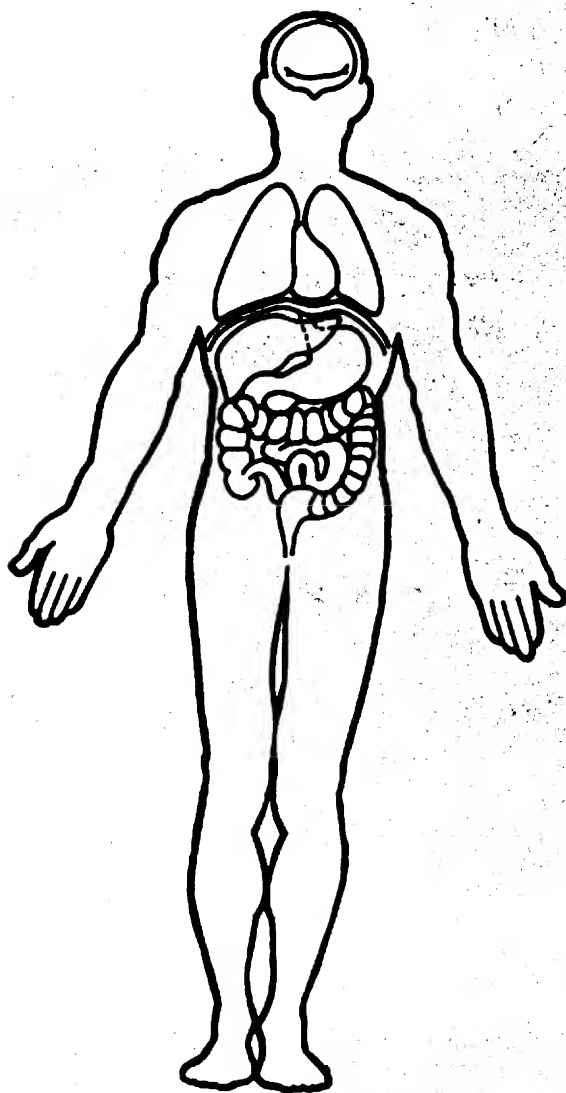
HCO<sub>3</sub> = \_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

95-08

3. Vehicle Number

02

4. Occupant Number

02

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

13

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

168Code actual height to the nearest  
centimeter.

(999) Unknown

66 inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

050Code actual weight to the nearest  
kilogram.

(999)Unknown

110 pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

13

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

**EJECTION/ENTRAPMENT****12. Ejection**

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0**13. Ejection Area**

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0**14. Ejection Medium**

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

0**15. Medium Status (Immediately Prior To Impact)**

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0**16. Entrapment**

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0**17. Occupant Mobility**

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

3

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

19. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt \_\_\_\_\_
- (03) Lap belt \_\_\_\_\_
- (04) Lap and shoulder belt \_\_\_\_\_
- (05) Belt used—type unknown \_\_\_\_\_
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used \_\_\_\_\_

20. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Shoulder Belt Upper Anchorage Adjustment 2

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown \_\_\_\_\_
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_



**POLICE REPORTED RESTRAINT USE**28. Police Reported Belt Use 1

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):  
 (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [✓] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):  
 [ ] Unknown if belt used

**AIR BAG SYSTEM FUNCTION**30. Frontal Air Bag System Availability/Function (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 1

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0052

- (000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(996) Deployment, unknown longitudinal Delta V  
(997) Not deployed  
(998) Unknown if deployed  
(999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 0 1  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
1 - lateral  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses *damaged*  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints *Full Down Position*  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 0 1  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 3  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track  
*Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 23  
 (00) Occupant not seated or no seat  
 (01) Not adjustable

12°

*Upright prior to impact*

- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

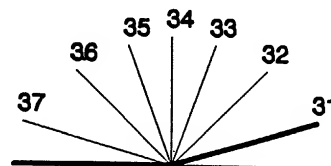
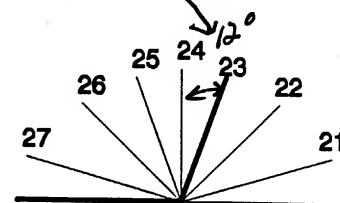
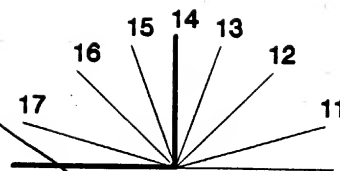
*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position

(99) Unknown



54. Seat Performance (this Occupant Position) +  
 (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

*Seat track jammed*

**CHILD SAFETY SEAT**

55. Child Safety Seat Make/Model 000  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 0  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify):

(8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*  
 (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
 (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 00

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)** 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality** 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

**Nonfatal**

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)** 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

**64. Hospital Stay** 01

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost** 97

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death 00  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_

- (97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

- (99) Unknown

70. Number of Recorded Injuries for This Occupant \_\_\_\_\_  
 \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score 0 2  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

72. Was the Occupant Given Blood? 1  
 (1) No - blood not given  
 (2) Yes - blood given  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 0 1  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 1  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	A.I.S. - 90		Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number		
		Type of Anatomic Structure	Specific Anatomic Structure									
cont head	1st	5. 2	6. 1	7. 9	8. 04	9. 02	10. 1	11. 9	12. (RR) 160	13. 2	14. 1	15. 02
cont @ thor	2nd	16. 2	17. 8	18. 5	19. 06	20. 02	21. 1	22. 1	23. 152	24. 1	25. 1	26. 02
cont @ thor	3rd	27. 2	28. 8	29. 5	30. 06	31. 02	32. 1	33. 2	34. 152	35. 1	36. 1	37. 02
Abc of limb	4th	38. 2	39. 8	40. 9	41. 02	42. 02	43. 1	44. 3	45. 152	46. 1	47. 1	48. 02
20 @ thor	5th	49. 2	50. 7	51. 5	52. 22	53. 00	54. 2	55. 2	56. (RR) 162	57. 1	58. 1	59. 02
Abc @ thor	6th	60. 2	61. 8	62. 9	63. 02	64. 02	65. 1	66. 1	67. 012	68. 1	69. 1	70. 02
limb @ thor	7th	71. 2	72. 8	73. 9	74. 04	75. 02	76. 1	77. 1	78. 013	79. 1	80. 1	81. 02
	8th	82. ____	83. ____	84. ____	85. ____	86. ____	87. ____	88. ____	89. ____	90. ____	91. ____	92. ____
	9th	93. ____	94. ____	95. ____	96. ____	97. ____	98. ____	99. ____	100. ____	101. ____	102. ____	103. ____
	10th	104. ____	105. ____	106. ____	107. ____	108. ____	109. ____	110. ____	111. ____	112. ____	113. ____	114. ____

## OCCUPANT INJURY DATA

	Source of Injury Data	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
11th	—	—	—	— —	— —	—	—	— — —	—	—	— —
12th	—	—	—	— —	— —	—	—	— — —	—	—	— —
13th	—	—	—	— —	— —	—	—	— — —	—	—	— —
14th	—	—	—	— —	— —	—	—	— — —	—	—	— —
15th	—	—	—	— —	— —	—	—	— — —	—	—	— —
16th	—	—	—	— —	— —	—	—	— — —	—	—	— —
17th	—	—	—	— —	— —	—	—	— — —	—	—	— —
18th	—	—	—	— —	— —	—	—	— — —	—	—	— —
19th	—	—	—	— —	— —	—	—	— — —	—	—	— —
20th	—	—	—	— —	— —	—	—	— — —	—	—	— —
21st	—	—	—	— —	— —	—	—	— — —	—	—	— —
22nd	—	—	—	— —	— —	—	—	— — —	—	—	— —
23rd	—	—	—	— —	— —	—	—	— — —	—	—	— —
24th	—	—	—	— —	— —	—	—	— — —	—	—	— —
25th	—	—	—	— —	— —	—	—	— — —	—	—	— —



## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		<b>Abbreviated Injury Scale</b>	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

SOURCE OF INJURY DATA	INJURY SOURCE CONFIDENCE LEVEL	DIRECT/INDIRECT INJURY
<u>OFFICIAL RECORDS</u>		
(1) Autopsy records with or without hospital/medical records	(1) Certain	(1) Direct contact injury
(2) Hospital/medical records other than emergency room (e.g., discharge summary)	(2) Probable	(2) Indirect contact injury
(3) Emergency room records only (including associated X-rays or other lab reports)	(3) Possible	(3) Noncontact injury
(4) Private physician, walk-in or emergency clinic	(9) Unknown	(7) Injured, unknown source
<u>UNOFFICIAL RECORDS</u>		
(5) Lay coroner report		
(6) E.M.S. personnel		
(7) Interviewee		
(8) Other source (specify):		
(9) Police		



## INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_
- (410) Raised roof

- (411) Well mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

## EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

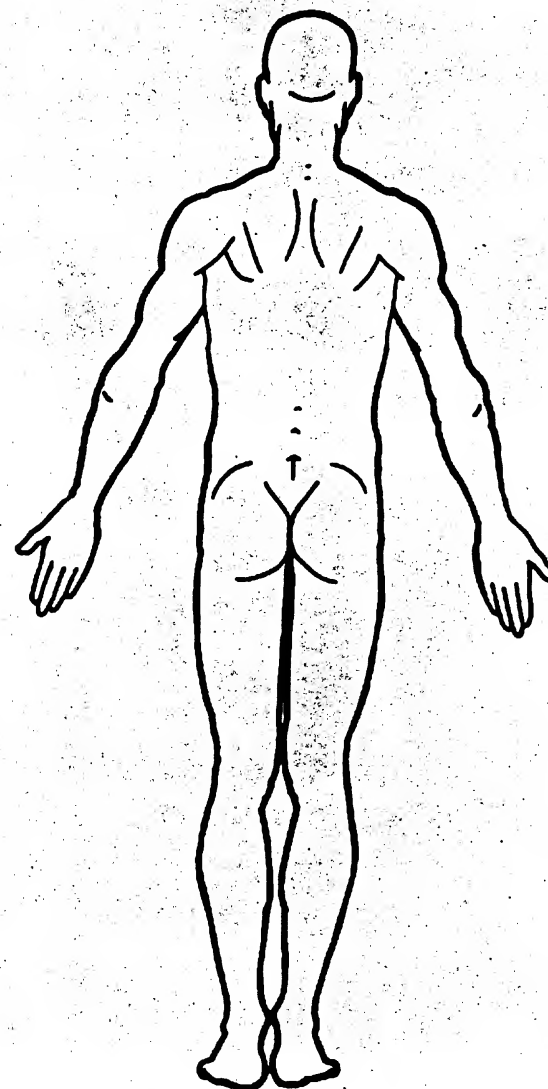
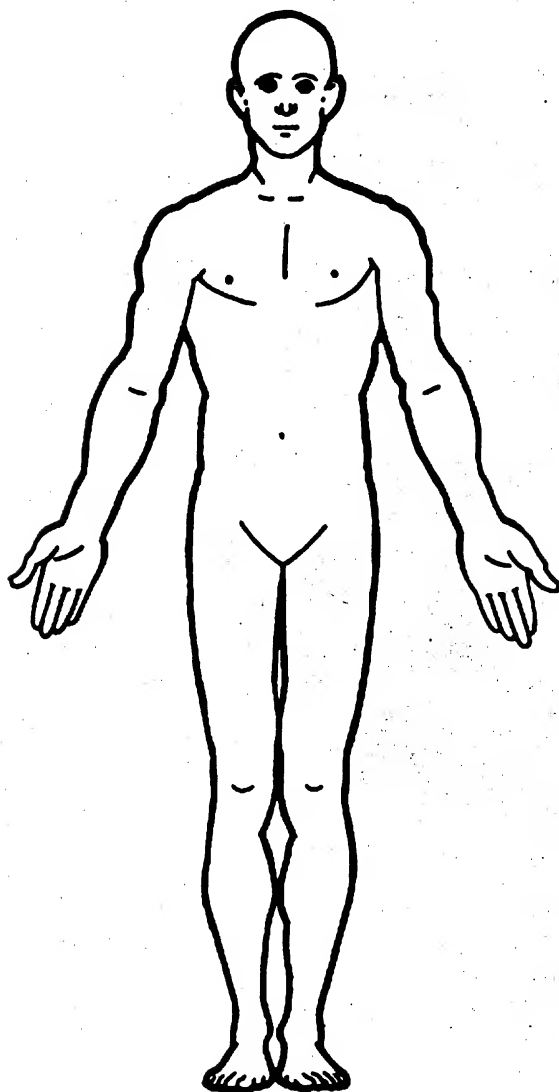
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

## NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

Arterial Blood  
Gases

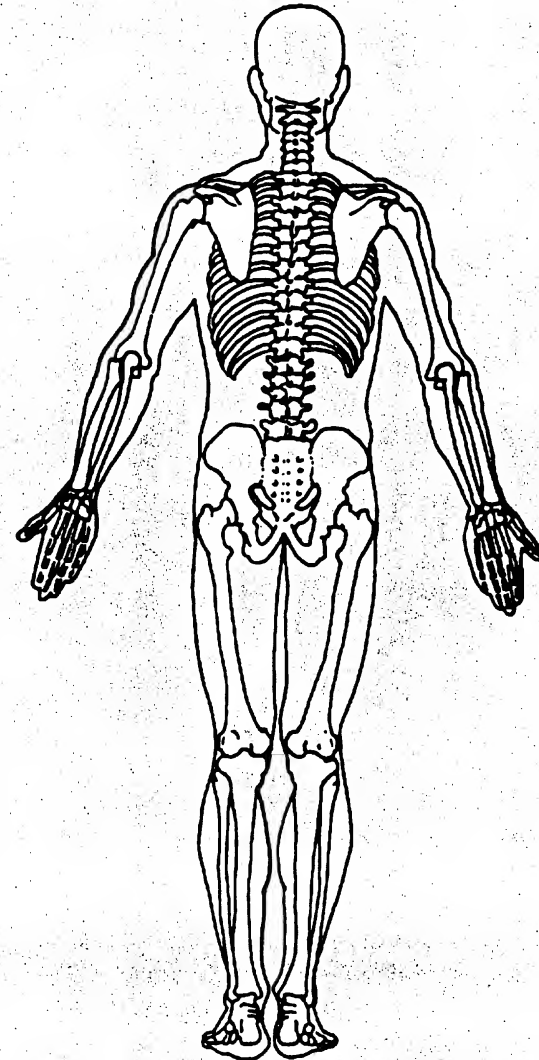
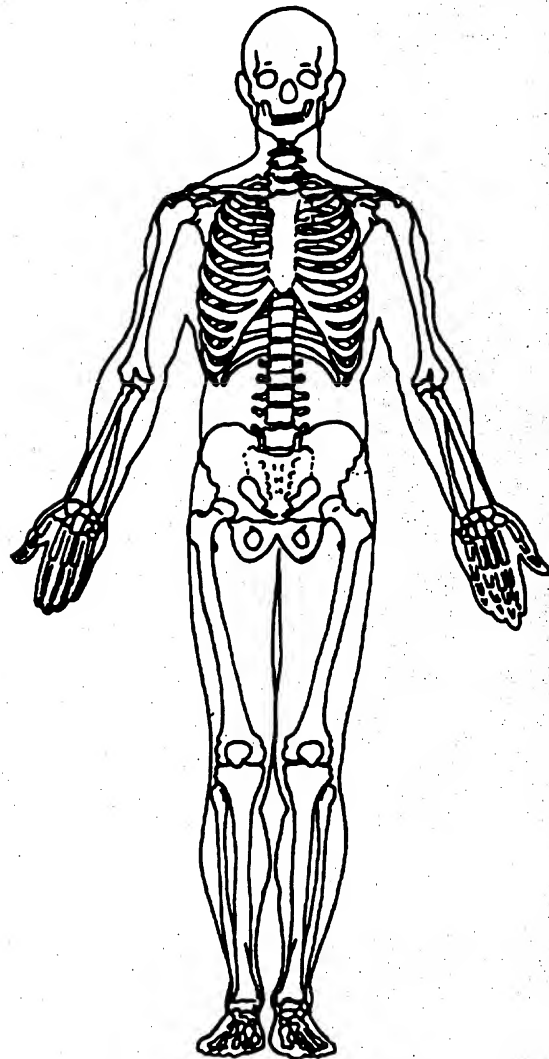
pH = \_\_\_

PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> \_\_\_

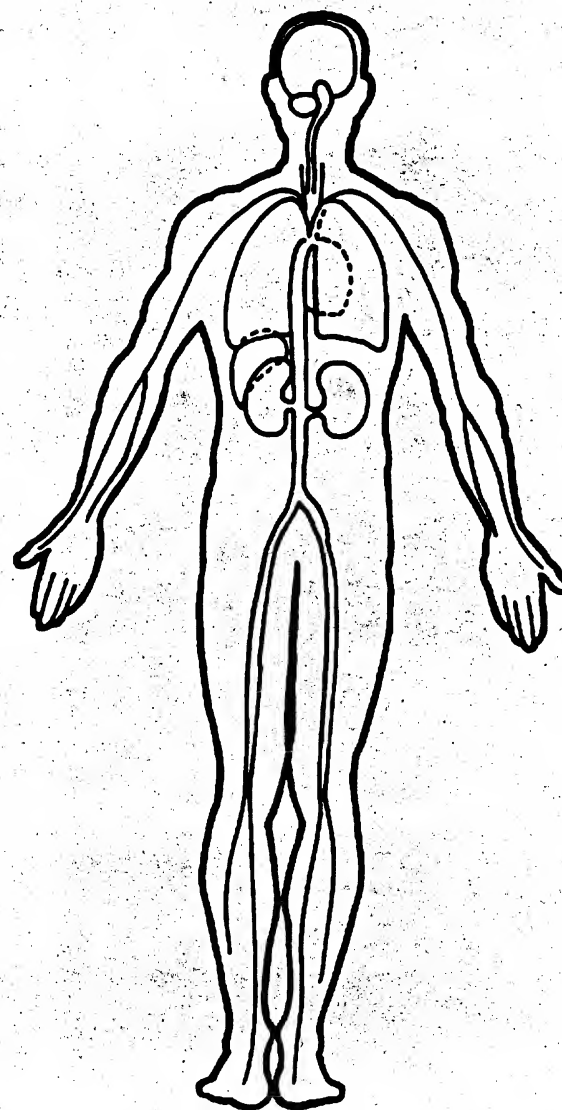
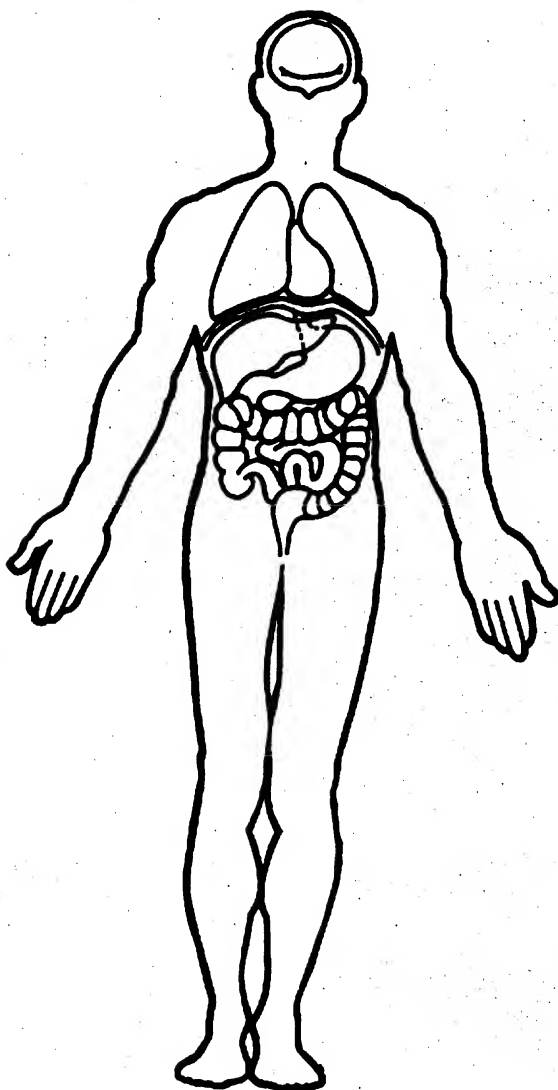
HCO<sub>3</sub> \_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# OCCUPANT ASSESSMENT FORM

BEST AVAILABLE

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

49 inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999)Unknown

60 pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown



**EJECTION/ENTRAPMENT****12. Ejection**

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0**13. Ejection Area**

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0**14. Ejection Medium**

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

0**15. Medium Status (Immediately Prior To Impact)**

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0**16. Entrapment**

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0**17. Occupant Mobility**

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

1

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

19. Manual (Active) Belt System Use 00

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt \_\_\_\_\_
- (03) Lap belt \_\_\_\_\_
- (04) Lap and shoulder belt \_\_\_\_\_
- (05) Belt used—type unknown \_\_\_\_\_
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used \_\_\_\_\_

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Shoulder Belt Upper Anchorage Adjustment 1

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown \_\_\_\_\_
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**POLICE REPORTED RESTRAINT USE**28. Police Reported Belt Use 0

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
☒ Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):

[ ] Unknown if belt used

**AIR BAG SYSTEM FUNCTION**30. Frontal Air Bag System Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

## 34. Are There Indications of Air Bag System Failure? (This Occupant Position) \_\_\_\_\_

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact +  
- 000

- (000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(996) Deployment, unknown longitudinal Delta V  
(997) Not deployed  
(998) Unknown if deployed  
(999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 00

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
(95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 02  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 0  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 03  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 1  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown



**HEAD RESTRAINT AND SEAT EVALUATION** *continued***53. Seat Back Incline Prior and Post Impact** 0 1

(00) Occupant not seated or no seat

(01) Not adjustable

*Upright prior to impact*

(11) Moved to completely rearward position

(12) Moved to rearward midrange position

(13) Moved to slightly rearward position

(14) Retained pre-impact position

(15) Moved to slightly forward position

(16) Moved to forward midrange position

(17) Moved to completely forward position

*Slightly reclined prior to impact*

(21) Moved to completely rearward position

(22) Moved to rearward midrange position

(23) Retained pre-impact position

(24) Moved to upright position

(25) Moved to slightly forward position

(26) Moved to forward midrange position

(27) Moved to completely forward position

*Completely reclined prior to impact*

(31) Retained pre-impact position

(32) Moved to rearward midrange position

(33) Moved to slightly rearward position

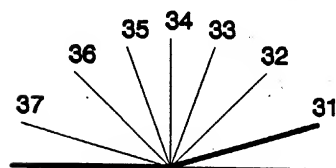
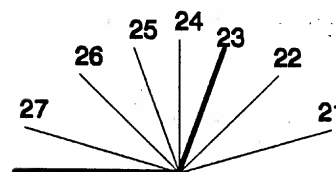
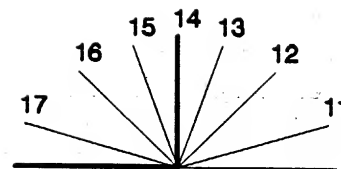
(34) Moved to upright position

(35) Moved to slightly forward position

(36) Moved to forward midrange position

(37) Moved to completely forward position

(99) Unknown

**54. Seat Performance (this Occupant Position)** \_\_\_\_\_

(0) Occupant not seated or no seat

(1) No seat performance failure(s)

(2) Seat adjusters failed

(3) Seat back folding locks or "seat back" failed  
(specify): \_\_\_\_\_

(4) Seat track/anchors failed

(5) Deformed by impact of occupant

(6) Deformed by passenger compartment  
intrusion, (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify): \_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify): \_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify): \_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify): \_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify): \_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

64. Hospital Stay *transferred to rehabilitation unit* 19

- (00) Not Hospitalized
- Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 97

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**

66. Time to Death 00  
 \_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
 (00) Not fatal  
 (96) Fatal - ruled disease  
 (99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00  
 \_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
 (00) Not fatal or no additional causes  
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): \_\_\_\_\_

(97) Other result (includes fatal ruled disease) (specify): \_\_\_\_\_

(99) Unknown

70. Number of Recorded Injuries for This Occupant \_\_\_\_\_  
 \_\_\_\_\_ Code the actual number of injuries recorded for this occupant.  
 (00) No recorded injuries  
 (97) Injured, details unknown  
 (99) Unknown if injured

**TRAUMA DATA**

71. Glasgow Coma Scale (GCS) Score 04  
 (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

72. Was the Occupant Given Blood? 2  
 (1) No - blood not given  
 (2) Yes - blood given unknown units  
 (specify units): \_\_\_\_\_  
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 07  
 (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**BELT USE DETERMINATION**

74. Primary Source of Belt Use Determination 1  
 (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Vehicle inspection  
 (2) Official injury data  
 (3) Driver/occupant interview  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown if belt used



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

BEST AVAILABLE  
Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

02

2. Case Number - Stratum

95-08

4. Occupant Number

03

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
<i>Unconscious</i> 1st	5. <u>2</u>	6. <u>1</u>	7. <u>6</u>	8. <u>08</u>	9. <u>24</u>	10. <u>5</u>	11. <u>0</u>	12. <u>160</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
<i>Lac scalp</i> 2nd	16. <u>2</u>	17. <u>1</u>	18. <u>9</u>	19. <u>06</u>	20. <u>04</u>	21. <u>1</u>	22. <u>5</u>	23. <u>160</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
<i>Skull-Exfr</i> 3rd	27. <u>2</u>	28. <u>1</u>	29. <u>5</u>	30. <u>04</u>	31. <u>06</u>	32. <u>4</u>	33. <u>1</u>	34. <u>160</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
<i>Skull</i> 4th	38. <u>2</u>	39. <u>1</u>	40. <u>5</u>	41. <u>04</u>	42. <u>06</u>	43. <u>4</u>	44. <u>2</u>	45. <u>160</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
<i>Operated helmet</i> 5th	49. <u>2</u>	50. <u>1</u>	51. <u>4</u>	52. <u>06</u>	53. <u>29</u>	54. <u>4</u>	55. <u>1</u>	56. <u>160</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
<i>Blair</i> 6th	60. <u>2</u>	61. <u>1</u>	62. <u>4</u>	63. <u>06</u>	64. <u>02</u>	65. <u>3</u>	66. <u>1</u>	67. <u>160</u>	68. <u>1</u>	69. <u>1</u>	70. <u>00</u>
<i>L</i> 7th	71. <u>2</u>	72. <u>1</u>	73. <u>4</u>	74. <u>06</u>	75. <u>02</u>	76. <u>3</u>	77. <u>2</u>	78. <u>160</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>
<i>L Blair</i> 8th	82. <u>2</u>	83. <u>1</u>	84. <u>4</u>	85. <u>06</u>	86. <u>04</u>	87. <u>5</u>	88. <u>8</u>	89. <u>160</u>	90. <u>1</u>	91. <u>1</u>	92. <u>00</u>
<i>Operated subdural</i> 9th	93. <u>2</u>	94. <u>1</u>	95. <u>4</u>	96. <u>06</u>	97. <u>52</u>	98. <u>4</u>	99. <u>1</u>	100. <u>160</u>	101. <u>1</u>	102. <u>1</u>	103. <u>00</u>
<i>Blair</i> 10th	104. <u>2</u>	105. <u>2</u>	106. <u>5</u>	107. <u>14</u>	108. <u>99</u>	109. <u>1</u>	110. <u>8</u>	111. <u>155</u>	112. <u>1</u>	113. <u>1</u>	114. <u>00</u>



## OCCUPANT INJURY DATA

[illegible]

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive	(1) Right
(2) Face		two-digit numbers	(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>	beginning with 02.	(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned		(4) Central
(5) Abdomen	consecutive two digit		(5) Anterior
(6) Spine	numbers beginning with	To the extent possible,	(6) Posterior
(7) Upper Extremity	02.	within the organizational	(7) Superior
(8) Lower Extremity		framework of the AIS, 00	(8) Inferior
(9) Unspecified	The exceptions to this rule	is assigned to an injury	(9) Unknown
	apply to:	NFS as to severity or	(0) Whole region
		where only one injury is	
		given in the dictionary for	
		that anatomic structure.	
		99 is assigned to any	
		injury NFS as to lesion or	
		severity.	
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>	<b>Abbreviated Injury Scale</b>	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

## SOURCE OF INJURY DATA

## INJURY SOURCE

## DIRECT/INDIRECT INJURY

## CONFIDENCE LEVEL

OFFICIAL RECORDS

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

UNOFFICIAL RECORDS

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## INJURY SOURCES

### FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

### RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

### INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

### AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

### ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top
- FLOOR**
- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

### REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

### ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_
- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

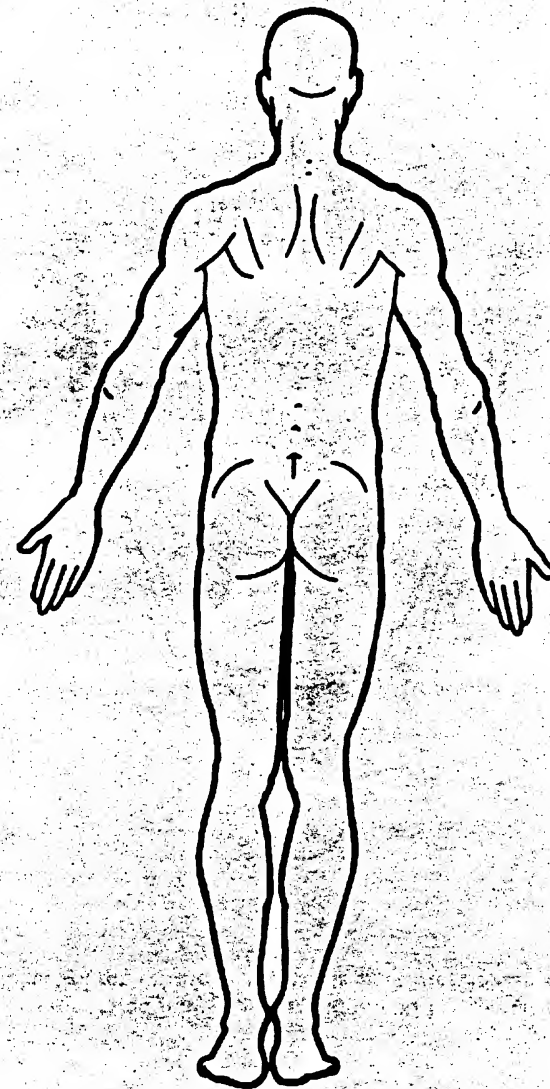
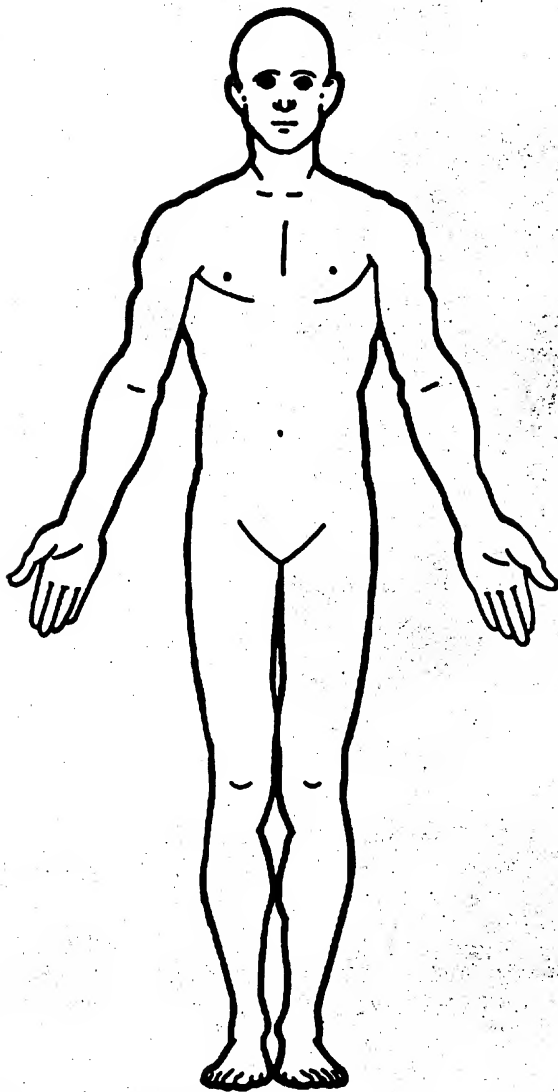
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

### NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_

Units of Blood  
Given

Units = \_\_\_

Arterial Blood  
Gases

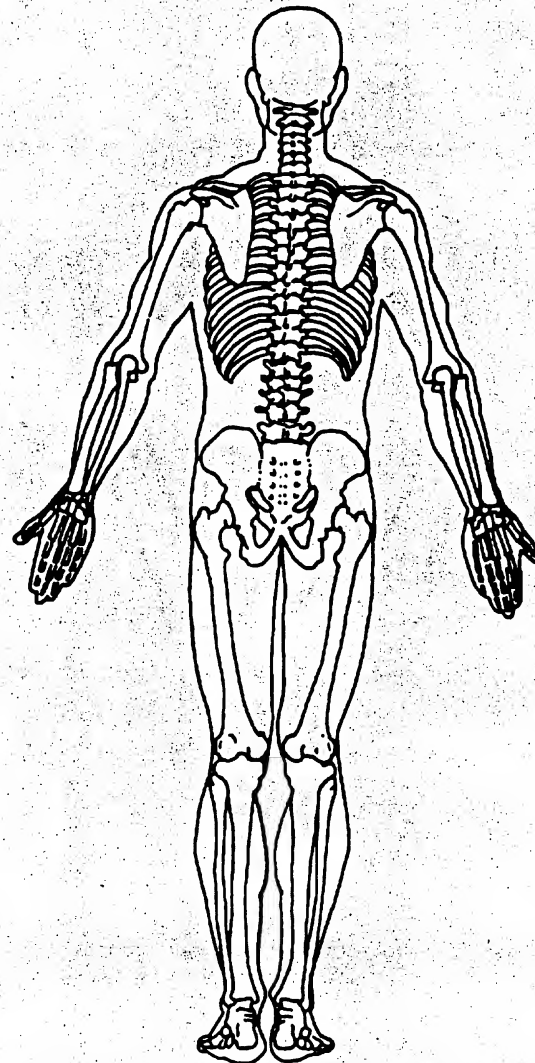
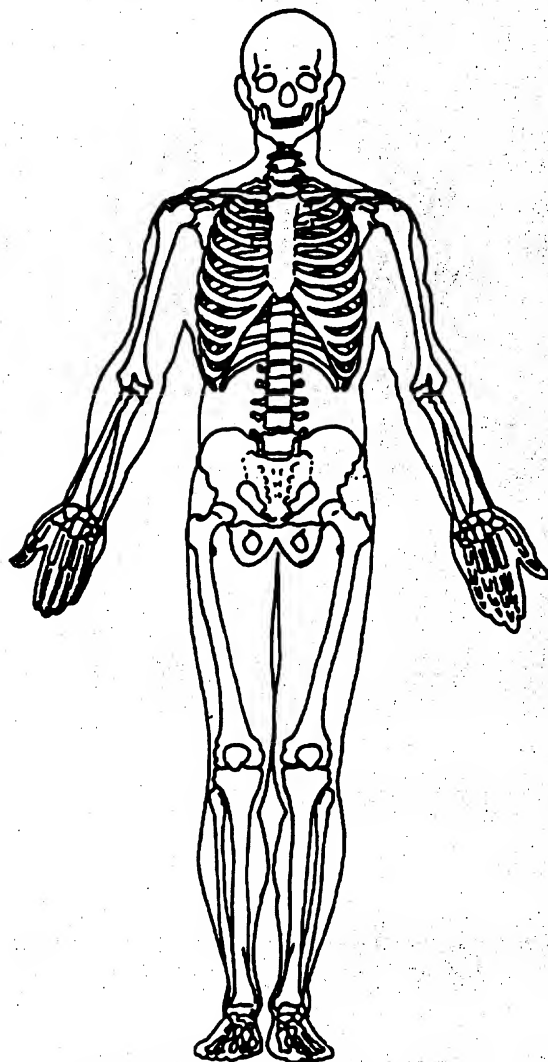
pH = \_\_\_

PO<sub>2</sub> = \_\_\_

PCO<sub>2</sub> = \_\_\_

HCO<sub>3</sub> = \_\_\_

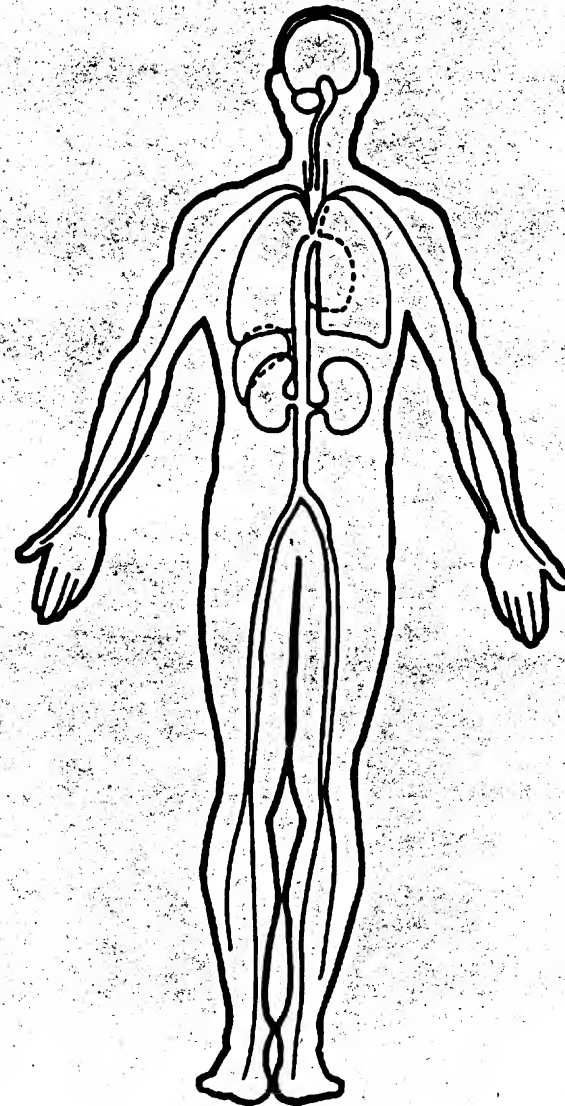
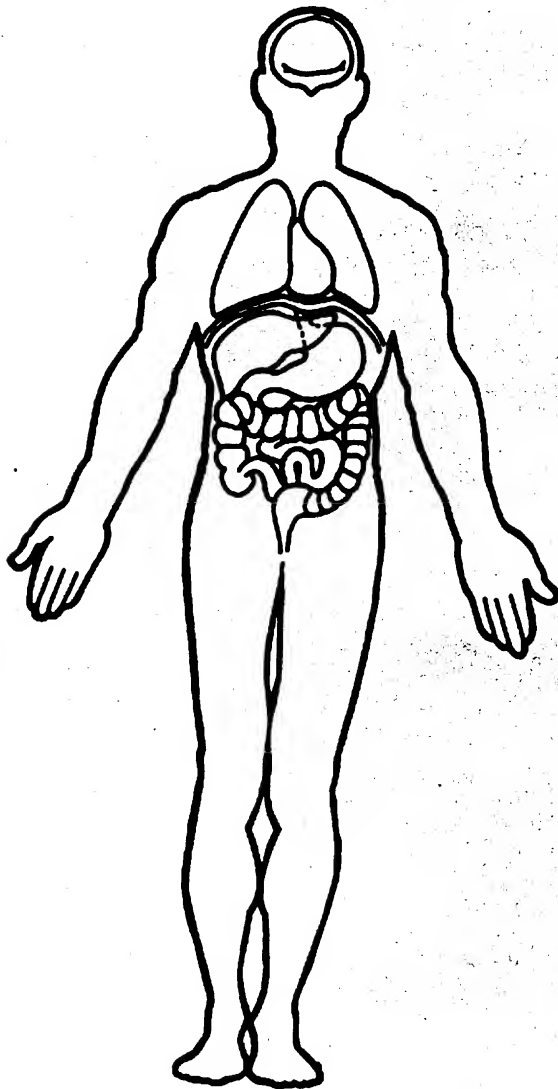
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





# OCCUPANT ASSESSMENT FORM

BEST AVAILABLE

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

4. Occupant Number

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

Code actual height to the nearest  
centimeter.

(999) Unknown

65 inches X 2.54 = \_\_\_\_\_ centimeters

8. Occupant's Weight

Code actual weight to the nearest  
kilogram.

(999) Unknown

120 pounds X .4536 = \_\_\_\_\_ kilograms

9. Occupant's Role

(1) Driver

(2) Passenger

(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

**EJECTION/ENTRAPMENT****12. Ejection**

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0**13. Ejection Area**

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0**14. Ejection Medium**

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

0**15. Medium Status (Immediately Prior To Impact)**

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0**16. Entrapment**

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0**17. Occupant Mobility**

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or disoriented
- (2) Removed from vehicle due to injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (9) Unknown

2

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

19. Manual (Active) Belt System Use 00

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt \_\_\_\_\_
- (03) Lap belt \_\_\_\_\_
- (04) Lap and shoulder belt \_\_\_\_\_
- (05) Belt used—type unknown \_\_\_\_\_
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used \_\_\_\_\_

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Shoulder Belt Upper Anchorage Adjustment 1

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown \_\_\_\_\_
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 0

- (0) None used  
 (1) Police did not indicate belt use  
 (2) Shoulder belt  
 (3) Lap belt  
 (4) Lap and shoulder belt  
 (5) Belt used, type not specified  
 (6) Child safety seat  
 (7) Automatic belt  
 (8) Other type belt, (specify):  
 (9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 1

- (0) No air bag available  
 (1) Police did not indicate air bag availability/function  
 (2) Deployed  
 (3) Not deployed  
 (4) Unknown if deployed  
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Not equipped/not available/destroyed or rendered inoperative  
 [ ] Vehicle inspection  
 [ ] Official injury data  
 [ ] Driver/occupant interview  
 [ ] Other (specify):  
 [ ] Unknown if belt used

30. Frontal Air Bag System Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available  
 (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):  
 (3) Air bag not reinstalled  
 (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

## 34. Are There Indications of Air Bag System Failure? (This Occupant Position) \_\_\_\_\_

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

(0) Not equipped/not available

(1) No previous accidents

Yes

(2) Previous accident(s) without deployment(s)

(3) One previous accident with deployment

(4) More than one previous accident with at least one deployment

(8) Previous accidents, unknown deployment status

(9) Unknown

36. Type of Air Bag 0

(0) Not equipped/not available

(1) Original manufacturer installed system

(2) Retrofitted air bag

(3) Replacement air bag

(8) Unknown type of air bag

(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

(0) Not equipped/not available

(1) No prior maintenance

(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

(00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

(96) Deployed, unknown event

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

39. CDC For Air Bag Deployment Impact 0

(0) Not equipped/not available

(1) Highest delta V

(2) Second highest delta V

(3) Other non-coded delta V (specify): \_\_\_\_\_

(6) Deployed, unknown event

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

40. Longitudinal Component of +

Delta V For Air Bag

Deployment Impact - 000

(\_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(\_996) Deployment, unknown longitudinal Delta V

(\_997) Not deployed

(\_998) Unknown if deployed

(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

(0) Not equipped/not available

(1) No

(2) Yes

(3) Deployed, unknown if flap(s) opened at designated tear points

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(3) Deployed, unknown if air bag module cover flap(s) damaged

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

43. Was There Damage To The Air Bag? 00

(00) Not equipped/not available

(01) Not damaged

Yes - Air Bag Damage

(02) Ruptured

(03) Cut

(04) Torn

(05) Holed

(06) Burned

(07) Abraded

(88) Other damage (specify): \_\_\_\_\_

(95) Damaged, details unknown

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 00  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 0  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 03  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 1  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 01  
 (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

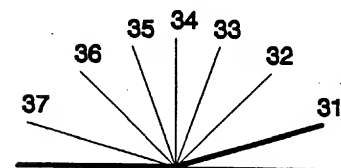
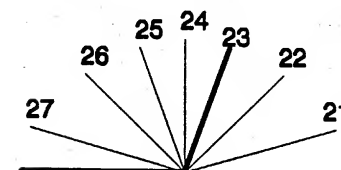
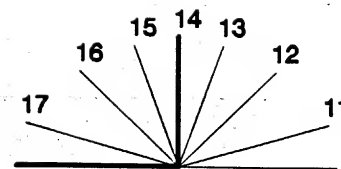
*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position

(99) Unknown



54. Seat Performance (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed  
 (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment  
 intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

**CHILD SAFETY SEAT**55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

64. Hospital Stay 09

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 97

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**



**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**66. Time to Death 02

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0268. 2nd Medically Reported Cause of Death 0269. 3rd Medically Reported Cause of Death 02

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant     

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score 05  
(at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 9

- (1) No - blood not given  
(2) Yes - blood given

(specify units):

- (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 18

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 1

- (0) Not equipped/not available/destroyed or rendered inoperative

- (1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):

- (9) Unknown if belt used



BEST AVAILABLE

U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	4. Occupant Number

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90			Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number		
			Specific Anatomic Structure	Level of Injury	A.I.S. Severity						
Skull Fr	5. 2	6. 1	7. 5	8. 04	9. 04	10. 3	11. 2	12. 160	13. 1	14. 1	15. 02
RF											
2nd	16. 2	17. 2	18. 5	19. 08	20. 02	21. 2	22. 1	23. 160	24. 1	25. 1	26. 02
RF											
3rd	27. 2	28. 2	29. 5	30. 12	31. 02	32. 2	33. 1	34. 160	35. 1	36. 1	37. 02
4th	38. 2	39. 2	40. 5	41. 12	42. 02	43. 2	44. 2	45. 160	46. 1	47. 1	48. 02
Cont Scalp	49. 2	50. 1	51. 9	52. 04	53. 02	54. 1	55. 2	56. 160	57. 1	58. 1	59. 02
6th	60. 2	61. 1	62. 9	63. 02	64. 02	65. 1	66. 2	67. 160	68. 1	69. 1	70. 02
7th	71. 2	72. 1	73. 4	74. 06	75. 20	76. 3	77. 3	78. 160	79. 1	80. 1	81. 02
8th	82. 2	83. 2	84. 9	85. 06	86. 02	87. 1	88. 7	89. 160	90. 1	91. 1	92. 02
9th	93. 2	94. 2	95. 9	96. 02	97. 02	98. 4	99. 2	100. 160	101. 1	102. 1	103. 02
10th	104. 2	105. 2	106. 9	107. 02	108. 02	109. 1	110. 2	111. 160	112. 1	113. 1	114. 02

[illegible]

## OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure.	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<b>Whole Area</b>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<b>Head - LOC</b>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<b>Spine</b>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
<b>SOURCE OF INJURY DATA</b>		<b>INJURY SOURCE</b>	<b>DIRECT/INDIRECT INJURY</b>
		<b>CONFIDENCE LEVEL</b>	
<b>OFFICIAL RECORDS</b>		(1) Certain	(1) Direct contact injury
(1) Autopsy records with or without hospital/medical records		(2) Probable	(2) Indirect contact injury
(2) Hospital/medical records other than emergency room (e.g., discharge summary)		(3) Possible	(3) Noncontact injury
(3) Emergency room records only (including associated X-rays or other lab reports)		(9) Unknown	(7) Injured, unknown source
(4) Private physician, walk-in or emergency clinic			
<b>UNOFFICIAL RECORDS</b>			
(5) Lay coroner report			
(6) E.M.S. personnel			
(7) Interviewee			
(8) Other source (specify):			
(9) Police			

## INJURY SOURCES

### FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

### RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

### INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

### AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_

- (195) Other air bag compartment cover (specify): \_\_\_\_\_

### ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

### FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

### REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

### ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

### NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source



# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

☐ No

☐ Yes

Blood Alcohol Level  
(mg/dl)

BAL =

Glasgow Coma  
Scale Score

GCSS =

Units of Blood  
Given

Units =

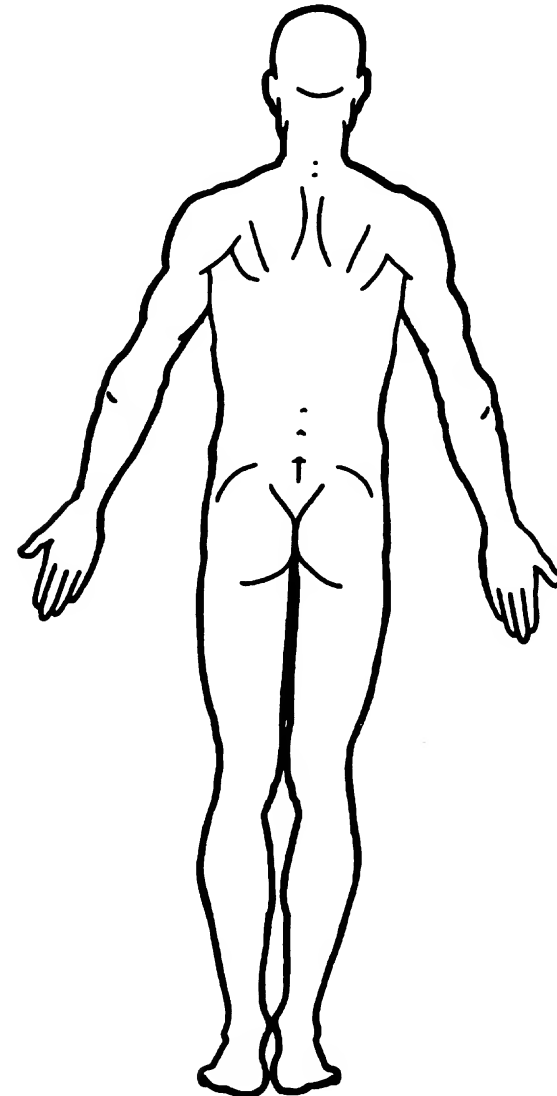
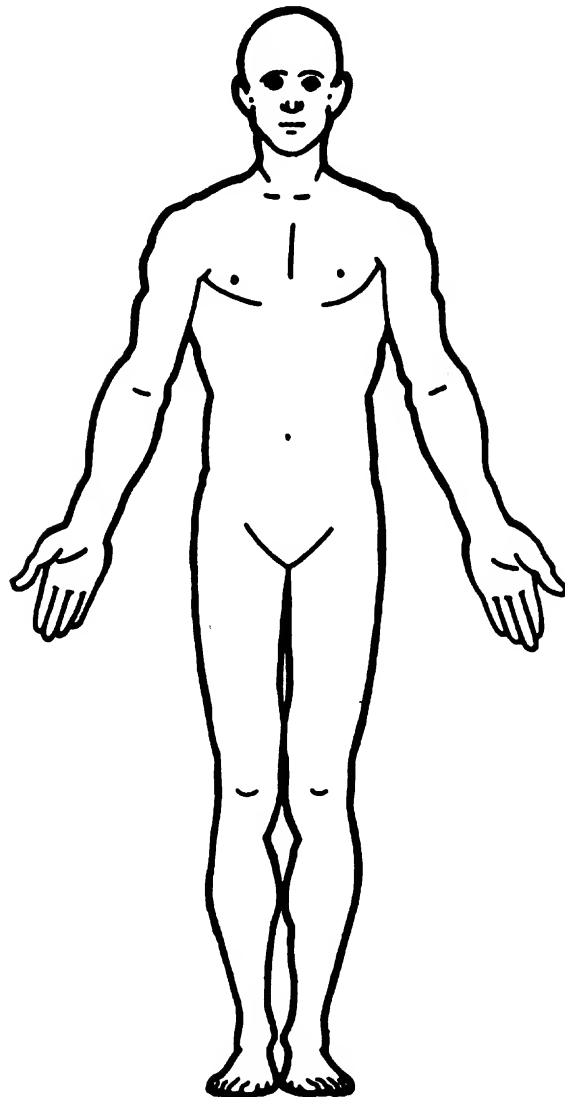
Arterial Blood Gases

pH =

PO<sub>2</sub> =

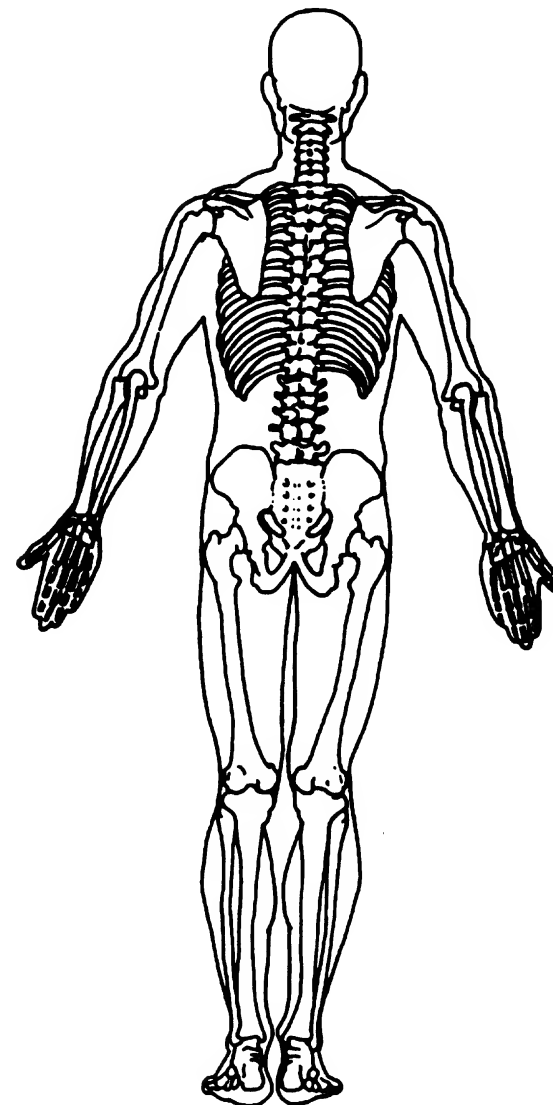
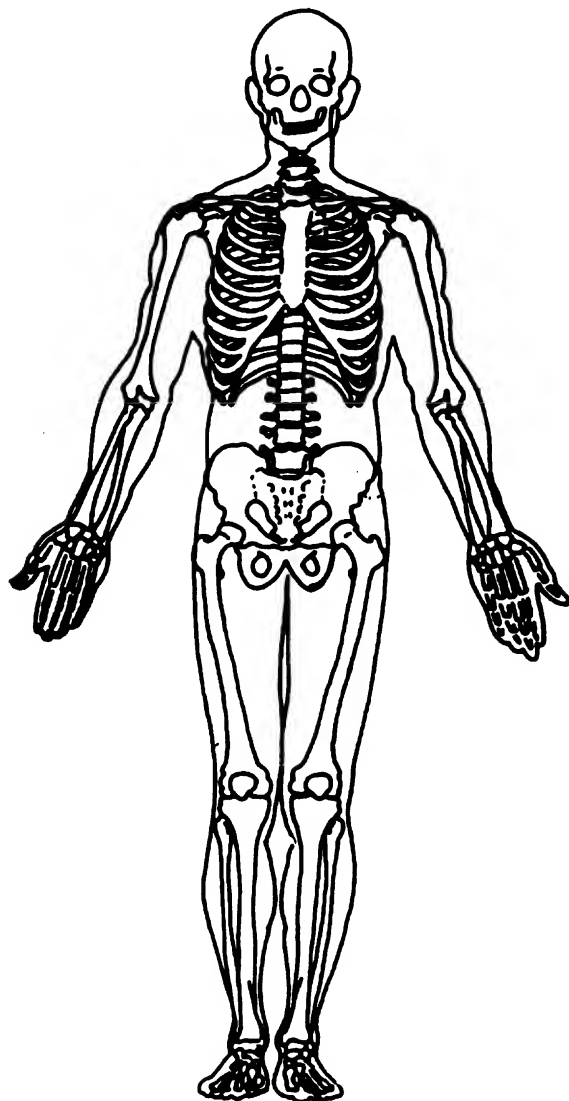
PCO<sub>2</sub>

HCO<sub>3</sub>



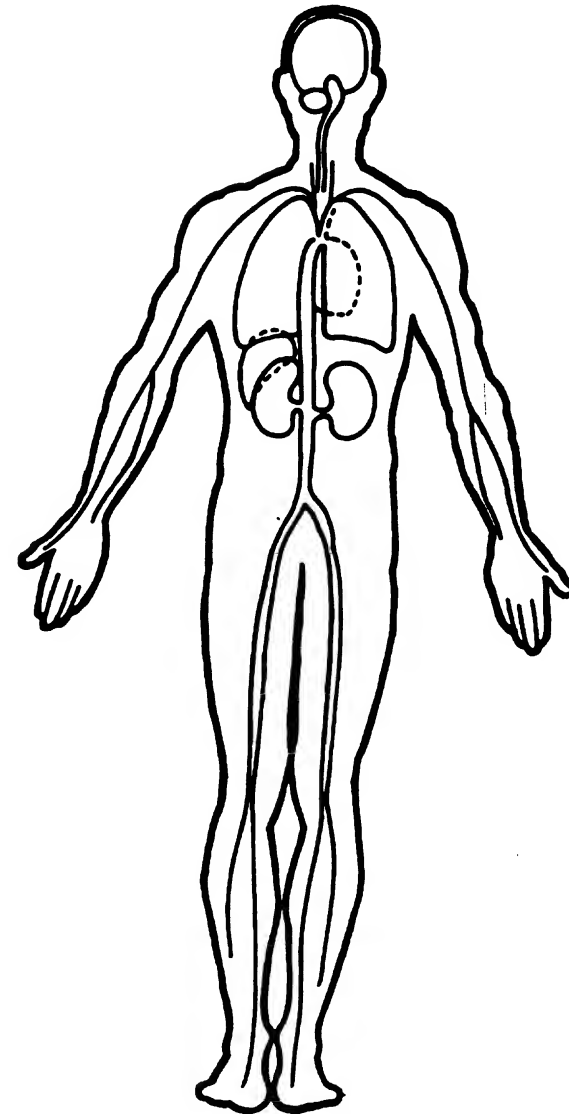
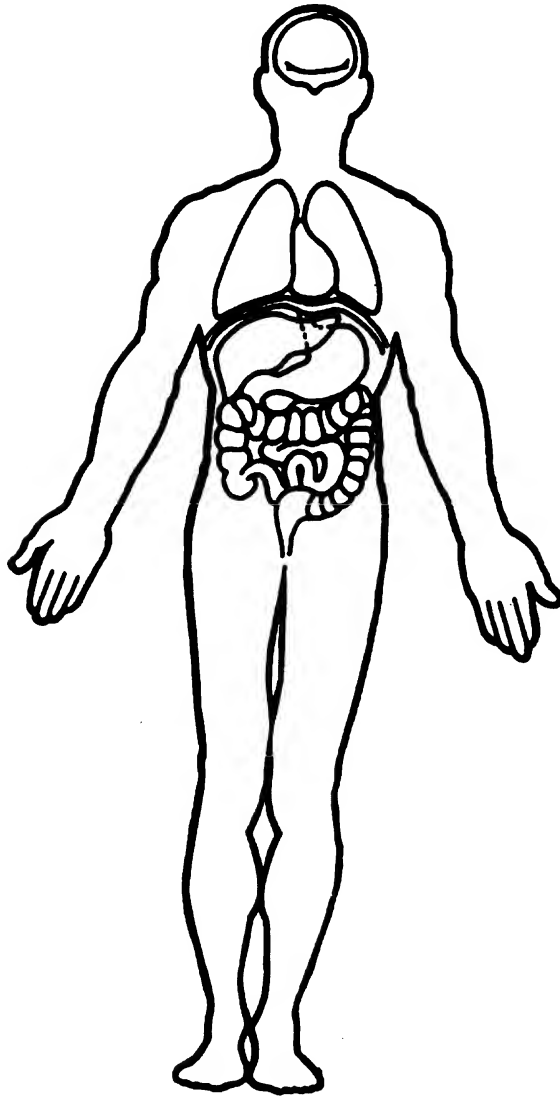
## OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

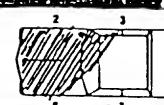
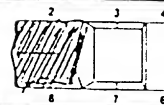


## OFFICIAL INJURY DATA – INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# TRAFFIC CRASH REPORT

LOCAL REPORT NO. [REDACTED]		<input checked="" type="checkbox"/> OH-2 <input checked="" type="checkbox"/> OH-3		REPORTING AGENCY [REDACTED]		N.C.I.C. [REDACTED]	
REPORT TAKEN <input type="checkbox"/> AT STATION <input checked="" type="checkbox"/> AT SCENE		NO. OF VEH. PEDESTRIANS INVOLVED 2		CRASH SEVERITY (CHECK MOST SEVERE) <input type="checkbox"/> FATAL <input checked="" type="checkbox"/> INJURY <input type="checkbox"/> PROPERTY DAMAGE ONLY		COMBINED VEH/PROP LOSS <input checked="" type="checkbox"/> OVER \$150 <input type="checkbox"/> UNDER \$150	
IN COUNTY OF [REDACTED]		IN <input checked="" type="checkbox"/> CITY <input type="checkbox"/> VILLAGE <input type="checkbox"/> TWP OF [REDACTED]		DATE OF CRASH: DAY [REDACTED] MONTH [REDACTED] YEAR [REDACTED]		HIT SKIP <input type="checkbox"/> SOLVED <input type="checkbox"/> UNSOLVED <input type="checkbox"/>	
CRASH OCCURRED ON [REDACTED]				WITHIN THE INTERSECTION OF [REDACTED]			
IF NOT IN INTERSECTION MILES: 420 FEET W <input checked="" type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E OF [REDACTED]				CITY CODE [REDACTED]			
LOG-1 [REDACTED]		LOG-2 [REDACTED]		LOG-3 [REDACTED]		LOG-4 [REDACTED]	
UNIT NO. 1		NO. OF OCCUPANTS [REDACTED]		OPERATING <input checked="" type="checkbox"/> PARKED <input type="checkbox"/> DRIVERLESS <input type="checkbox"/> HIT & RUN <input type="checkbox"/> NON-CONTACT <input type="checkbox"/>		INSURANCE CO. OR AGENT [REDACTED]	
DRIVER-PEDESTRIAN NAME (LAST, FIRST, MI) [REDACTED]				ADDRESS (NO., STREET, CITY, STATE, ZIP CODE) [REDACTED]			
PHONE NO. [REDACTED]		BIRTH DATE [REDACTED]		AGE [REDACTED] SEX [REDACTED]		SOCIAL SECURITY NO. [REDACTED]	
STATE [REDACTED]		DRIVER'S LICENSE NO. [REDACTED]		OCCUPATION [REDACTED]			
OWNER (IF SAME AS DRIVER, WRITE SAME) [REDACTED]				ADDRESS [REDACTED]			
PHONE [REDACTED]							
VEH YR [REDACTED]		MAKE [REDACTED]		MODEL [REDACTED]		COLOR [REDACTED]	
STYLE [REDACTED]		STATE [REDACTED]		LICENSE PLATE NO. [REDACTED]		TOWING SERVICE [REDACTED]	
VEH/PED DIR FROM [REDACTED]							
CIRCLE DAMAGE AREAS 		9 TOP 10 UNDERCAR 11 LOAD 12 TRAILER		DAMAGE SEVERITY <input type="checkbox"/> NON-FUNCTIONAL <input type="checkbox"/> FUNCTIONAL <input checked="" type="checkbox"/> DISABLING		DAMAGE SCALE <input type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> LIGHT <input checked="" type="checkbox"/> HEAVY	
VEHICLE DISPOSITION <input type="checkbox"/> DRIVEN AWAY <input type="checkbox"/> REMAINED AT SCENE <input checked="" type="checkbox"/> TOWED		FIRE <input checked="" type="checkbox"/> NO FIRE <input type="checkbox"/> FIRE DUE TO CRASH <input type="checkbox"/> OTHER FIRE					
UNIT NO. 2		NO. OF OCCUPANTS 4		OPERATING <input checked="" type="checkbox"/> PARKED <input type="checkbox"/> DRIVERLESS <input type="checkbox"/> HIT & RUN <input type="checkbox"/> NON-CONTACT <input type="checkbox"/>		INSURANCE CO. OR AGENT [REDACTED]	
DRIVER-PEDESTRIAN NAME (LAST, FIRST, MI) [REDACTED]				ADDRESS (NO., STREET, CITY, STATE, ZIP CODE) [REDACTED]			
PHONE NO. [REDACTED]		BIRTH DATE [REDACTED]		AGE 34 SEX F		SOCIAL SECURITY NO. [REDACTED]	
STATE [REDACTED]		DRIVER'S LICENSE NO. [REDACTED]		OCCUPATION [REDACTED]			
OWNER (IF SAME AS DRIVER, WRITE SAME) SAME				ADDRESS [REDACTED]			
PHONE [REDACTED]							
VEH YR 94		MAKE DODGE		MODEL INTREPID		COLOR RED	
STYLE 4DR		STATE [REDACTED]		LICENSE PLATE NO. [REDACTED]		TOWING SERVICE [REDACTED]	
VEH/PED DIR FROM S TO							
CIRCLE DAMAGE AREAS 		9 TOP 10 UNDERCAR 11 LOAD 12 TRAILER		DAMAGE SEVERITY <input type="checkbox"/> NON-FUNCTIONAL <input type="checkbox"/> FUNCTIONAL <input checked="" type="checkbox"/> DISABLING		DAMAGE SCALE <input type="checkbox"/> NONE <input type="checkbox"/> MODERATE <input type="checkbox"/> LIGHT <input checked="" type="checkbox"/> HEAVY	
VEHICLE DISPOSITION <input type="checkbox"/> DRIVEN AWAY <input type="checkbox"/> REMAINED AT SCENE <input checked="" type="checkbox"/> TOWED		FIRE <input checked="" type="checkbox"/> NO FIRE <input type="checkbox"/> FIRE DUE TO CRASH <input type="checkbox"/> OTHER FIRE					
FROM UNIT NO. 1		NAME (LAST, FIRST, MI) [REDACTED]		BIRTH DATE [REDACTED]		AGE 17	
ADDRESS [REDACTED]		PHONE [REDACTED]		SEX M		POSITION 1 1 3 3 6 4	
FROM UNIT NO. 2		NAME (LAST, FIRST, MI) [REDACTED]		BIRTH DATE [REDACTED]		AGE 13	
ADDRESS [REDACTED]		PHONE [REDACTED]		SEX M		INJURIES 2 2 2 2 2 2	
FROM UNIT NO. 2		NAME (LAST, FIRST, MI) [REDACTED]		BIRTH DATE [REDACTED]		AGE 11	
ADDRESS [REDACTED]		PHONE [REDACTED]		SEX F		CONDITION 1 1 1 1 1 1	
FROM UNIT NO. 2		NAME (LAST, FIRST, MI) [REDACTED]		BIRTH DATE [REDACTED]		AGE 7	
ADDRESS [REDACTED]		PHONE [REDACTED]		SEX F		RESTRAINTS 7 7 7 7 1 1	
INJURED TAKEN TO [REDACTED]		BY [REDACTED]		INJURED TAKEN TO [REDACTED]		BY [REDACTED]	
OFFENSE CHARGED AND DESCRIPTION (2 COUNTS) VEHICULAR ASSAULT				OFFENSE CHARGED AND DESCRIPTION			
RECEIVED CALL 2023				DISPATCHED 2023		ARRIVED 2026	
CLEARED 2235		OTHER TIME 900		TOTAL MINUTES 1024		CHECKED BY [REDACTED]	
DATE REPORT FILED 95		PHOTOS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		OFFICER'S NAME [REDACTED]		BADGE NO. 16	

DRIVER-PEDESTRIAN-VEHICLE SECTION

OCCUPANT SECTION

POLICE ACTION

UNIT # 1 WAS S/B ON

WENT LEFT OF CENTER COLLIDING WITH UNIT #2 HEAD ON.

<b>WEATHER</b> 1 NO ADVERSE WEATHER 2 RAIN 3 SNOW 4 FOG 5 HIGH WIND 6 OTHER			<b>FIRST HARMFUL EVENT</b> 1 <b>TWO MV IN TRANSPORT</b> 1 HEAD ON 2 REAR-END 3 BACKING 4 SIDESWIPE MEETING 5 SIDESWIPE PASSING 6 ANGLE <b>ONE MV IN TRANSPORT</b> (COLLISION) 7 PARKED MOTOR VEH 8 PEDESTRIAN 9 ANIMAL 10 TRAIN 11 PEDALCYCLE 12 OTHER NON-M V 13 FIXED OBJECT 14 OTHER OBJECT (NON-COLLISION) 15 FALL FROM OR IN VEH 16 OVERTURNING 17 OTHER NON-COLLISION														
<b>ROAD CONDITIONS</b> 1 DRY 2 WET 3 SNOW 4 ICE 5 DIRT/SAND 6 OTHER			<b>LOCATION</b> 1 INTERSECTION 2 INTERSECTION-RELATED 3 DRIVEWAY ACCESS 4 RAILROAD CROSSING 5 BRIDGE-PASSING OVER 6 BRIDGE-PASSING UNDER 7 NON-INTERSECTION 8 PRIVATE PROPERTY			<b>SHOW NORTH WITH ARROW</b> ↑											
<b>LIGHT</b> 1 DAYLIGHT 2 DAWN 3 DUSK 4 DARK NO LIGHTS 5 DARK-LIGHTED 6 OTHER			<b>LOCATION</b> 1 INTERSECTION 2 INTERSECTION-RELATED 3 DRIVEWAY ACCESS 4 RAILROAD CROSSING 5 BRIDGE-PASSING OVER 6 BRIDGE-PASSING UNDER 7 NON-INTERSECTION 8 PRIVATE PROPERTY			<b>SHOW NORTH WITH ARROW</b> ↑											
<b>ROAD CONTOUR</b> 1 STRAIGHT LEVEL 2 STRAIGHT GRADE 3 CURVE LEVEL 4 CURVE GRADE			<b>LOCATION</b> 1 INTERSECTION 2 INTERSECTION-RELATED 3 DRIVEWAY ACCESS 4 RAILROAD CROSSING 5 BRIDGE-PASSING OVER 6 BRIDGE-PASSING UNDER 7 NON-INTERSECTION 8 PRIVATE PROPERTY			<b>SHOW NORTH WITH ARROW</b> ↑											
<b>OCCURRENCE</b> 1 ON ROADWAY 2 OFF LEFT SIDE 3 OFF RIGHT SIDE 4 ON OPPOSING LANE OF A DIVIDED HIGHWAY			<b>LOCATION</b> 1 INTERSECTION 2 INTERSECTION-RELATED 3 DRIVEWAY ACCESS 4 RAILROAD CROSSING 5 BRIDGE-PASSING OVER 6 BRIDGE-PASSING UNDER 7 NON-INTERSECTION 8 PRIVATE PROPERTY			<b>SHOW NORTH WITH ARROW</b> ↑											
<b>SPECIAL AREA</b> 1 ROAD CONSTRUCTION 2 MAINTENANCE AREA 3 SCHOOL ZONE			<b>LOCATION</b> 1 INTERSECTION 2 INTERSECTION-RELATED 3 DRIVEWAY ACCESS 4 RAILROAD CROSSING 5 BRIDGE-PASSING OVER 6 BRIDGE-PASSING UNDER 7 NON-INTERSECTION 8 PRIVATE PROPERTY			<b>SHOW NORTH WITH ARROW</b> ↑											
<b>TYPE OF UNIT</b> 1 CAR 2 BUS 3 TRUCK 4 MOTORCYCLE 5 MC UP TO 350CC 6 MC351CC TO 750CC 7 MC OVER 751CC 8 MOTORIZED BICYCLE			<b>PRE-CRASH ACTIONS</b> 15 1			<b>CONTRIBUTING FACTOR</b> 13 1											
<b>CAR</b> 1 SUB-COMPACT 2 COMPACT 3 MID SIZE 4 FULL SIZE <b>TRUCK</b> 5 PICKUP 6 PANEL/VAN 7 STRAIGHT TRUCK 8 STRAIGHT TRUCK AND TRAILER 9 TRUCK TRACTOR 10 TRACTOR & SEMI-TRAILER 11 TRACTOR & DOUBLE TRAILER <b>MOTORCYCLE</b> 12 MC UP TO 350CC 13 MC351CC TO 750CC 14 MC OVER 751CC 15 MOTORIZED BICYCLE			<b>BUS</b> 16 SCHOOL 17 CHURCH 18 PUBLIC BUS <b>EMERGENCY</b> 19 POLICE VEHICLE 20 FIRE TRUCK 21 AMBULANCE/RESCUE <b>OTHER</b> 22 TAXI 23 MOTOR HOME 24 TRAIN 25 FARM VEHICLE 26 FARM EQUIPMENT 27 SNOWMOBILE 28 CONSTRUCTION EQUIP 29 ANIMAL W/RIDER 30 ANIMAL W/BUGGY 31 BICYCLE 32 ALL OTHERS P = PEDESTRIAN			<b>DRIVER ACTIONS</b> 1 GOING STRAIGHT 2 TURNING RIGHT 3 TURNING LEFT 4 TURNING ON RED LIGHT 5 U TURN 6 STOPPED TO TURN 7 STOPPED IN TRAFFIC 8 PARKING/UNPARKING 9 PARKED 10 BACKING 11 PASSING 12 CHANGING LANES 13 MERGING/EXITING RAMP 14 OUT OF CONTROL 15 SWERVING 16 DRIVERLESS VEH 17 OTHER DRV ACTIONS			<b>PEDESTRIAN ACTIONS</b> 18 CROSSING IN X-WALK 19 CROSSING OTHER THAN X-WALK 20 WALKING IN ROAD (WITH TRAFFIC) 21 WALKING IN ROAD (AGAINST TRAFFIC) 22 PLAYING IN ROAD 23 WORKING ON ROAD 24 ENTERING OR LEAVING VEHICLE 25 PUSHING/WORKING ON VEH IN ROAD 26 OTHER IN ROAD 27 ON SIDEWALK OR SHOULDER			<b>DRIVER ERROR</b> 1 NONE 2 FAILURE TO YIELD 3 UNSAFE SPEED 4 FOLLOWING TOO CLOSELY OR ACDA 5 RAN RED LIGHT 6 RAN STOP OR YIELD SIGN 7 IMPROPER TURN 8 IMPROPER PASSING 9 IMPROPER LANE CHANGE 10 IMPROPER BACKING 11 IMPROPER START FROM PARKED POSITION 12 STOPPED OR PARKED ILLEGALLY 13 LEFT OF CENTER 14 FAILURE TO CONTROL 15 DRIVER INATTENTION 16 DROVE OFF ROAD 17 OTHER DRIVER ERROR			<b>NON-DRIVER FACTOR</b> 18 VEHICLE DEFECTS 19 LOAD SHIFTING 20 FALLING, SPILLING 21 PAVEMENT DEFECT 22 SHOULDER DEFECT 23 DEBRIS ON ROAD 24 DOWNED TRAFFIC SIGN/DEVICE 25 VISION OBSTRUCTION 26 ANIMAL ACTIONS 27 PEDESTRIAN ACTIONS		
<b>SPEED</b> UNIT EST. LEGAL A 40 45 B 40 45			<b>MC HELMET USE</b> UNIT DRIVER PASS A B			<b>VEHICLE DEFECTS</b> CODE IF CONTRIBUTING FACTOR IS 18 PRIMARY SECONDARY			<b>VEHICLE DEFECTS</b> 1 TURN SIGNALS 2 HEAD LAMPS 3 TAIL LAMPS 4 BRAKES 5 STEERING 6 TIRE BLOWOUT 7 WORN OR FLICK TIRES 8 TRAILER EQUIPMENT DEFECTIVE 9 MOTOR TROUBLE 10 DISABLED FROM PRIOR ACCIDENT 11 OTHER DEFECTS								
<b>PLEASE CHECK TO SEE THAT ALL BOXES ARE CLEAR ENOUGH TO BE MICROFILMED</b>			<b>1 NO HELMET 2 FULL COVERAGE 3 FULL FACIAL COVER 4 OTHER TYPE HELMET</b>			<b>DRIVER</b> 1 NO CONTROLS 2 STOP SIGN 3 YIELD SIGN 4 TRAFFIC SIGNAL 5 TRAFFIC FLASHERS 6 SCHOOL ZONE 7 RAILROAD CROSSBUCKS 8 RAILROAD FLASHERS 9 RAILROAD GATES 10 CONSTR BARRICADES 11 POLICE OFFICER 12 PAVEMENT MARKINGS 13 OTHER <b>PEDESTRIAN</b> 14 NO CONTROLS 15 CROSSWALK LINES 16 WALK/DONT WALK DEVICE			<b>FIXED OBJECT STRUCK</b> 1 NONE 2 UTILITY POLE 3 TRAFFIC SIGN 4 BRIDGE/CULVERT 5 GUARD RAIL 6 FENCE 7 TREE 8 SHRUBBERY 9 CURB 10 DITCH 11 EMBANKMENT 12 BUILDING 13 MAIL BOX 14 CONSTRUCTION BARRICADE 15 FIRE HYDRANT 16 OTHER OBJECT			<b>TRUCK LOAD</b> 1 EMPTY 2 PERISHABLE GOODS 3 GENERAL FREIGHT 4 METAL/HEAVY MACHINERY 5 HAZARDOUS GAS 6 HAZARDOUS LIQUID 7 HAZARDOUS SOLID 8 RADIOACTIVE MATERIAL <b>TRUCK AXLES</b> A B					



ADMINISTRATIVE

AGENCY NAME [REDACTED]  
 GEOCODE [REDACTED]  
 TO [REDACTED] 2023  
 TOA [REDACTED] 2026  
 TOC [REDACTED] 2235

☐ INCIDENT  
☒ OFFENSE  
☐ SUPPLEMENT

## OHIO UNIFORM INCIDENT REPORT

INCIDENT NUMBER [REDACTED]  
 CLEARANCES  
 A ☐ DEATH OF OFFENDER G ☒ ARREST-JUVENILE  
 B ☐ PROSECUTION DECLINED H ☐ WARRANT ISSUED  
 C ☐ EXTRADITION DENIED I ☐ INVEST. PENDING  
 D ☐ VICTIM REFUSED TO COOP. J ☐ CLOSED  
 E ☐ JUVENILE/NO CUSTODY K ☐ UNFOUNDED  
 F ☐ ARREST - ADULT U ☐ UNKNOWN  
 CLEARANCE DATE [REDACTED] 95  
 CLEARED BY: [REDACTED]

REPORT DATE/TIME MONTH DAY YEAR TIME MONTH INCIDENT OCCURRED FROM DAY YEAR TIME MONTH INCIDENT OCCURRED TO DAY YEAR TIME  
 [REDACTED] [REDACTED] 95 2300 [REDACTED] [REDACTED] 95 2023 [REDACTED] [REDACTED] [REDACTED] [REDACTED]

INCIDENT LOCATION (Street, Apt., City, State, Zip) [REDACTED] 420 FT N OF [REDACTED] [REDACTED] [REDACTED] [REDACTED]  
 HATE/BIAS ☐ Y ☐ N EXPLAIN: ANTI: [REDACTED]

OFFENSE	OFFENSE CODE	A/C	F/M & DEGREE	TYPE CRIMINAL ACTIVITY
1. AGGRAVATED VEHICULAR ASSAULT	[REDACTED]	C	F4	1. 420 3. [REDACTED]
2. homicide	[REDACTED]			1. [REDACTED] 2. [REDACTED] 3. [REDACTED]
3.				1. [REDACTED] 2. [REDACTED] 3. [REDACTED]
4.				1. [REDACTED] 2. [REDACTED] 3. [REDACTED]
5.				1. [REDACTED] 2. [REDACTED] 3. [REDACTED]

(Enter up to three for each off.)  
 B- BUYING/REC.  
 C- CULTIVATING/MFG./PUB  
 D- DISTRIBUTING/SELLING  
 E- EXPLOITING CHILDREN  
 F- OPER/PROMOTING/ASSS  
 G- POSSESSING /CONCEALIN  
 H- TRANSP/TRANSMITTING  
 U- USING/CONSUMING

LOCATION OF OFFENSE (Enter up to two) 1. 47 2. [REDACTED]

RESIDENTIAL STRUCTURE	COMMERCIAL LOCATIONS	RETAIL	OUTSIDE	LARCENY TYPE
01 SINGLE FAMILY HOME	12 JAIL/PRISON	26 BAR	40 OTHER RETAIL STORE	23A <input type="checkbox"/> POCKET PICKING
02 MULTIPLE DWELLING	13 PARKING GARAGE	27 BUY/SELL/TRADE SHOP	41 FACTORY/MILL/PLANT	23B <input type="checkbox"/> PURSE SNATCHING
03 RESIDENTIAL FACILITY	14 OTHER PUBLIC ACCESS BUILDINGS	28 RESTAURANT	42 OTHER BUILDING	23C <input type="checkbox"/> SHOPLIFTING
04 OTHER RESIDENTIAL	15 AUTO SHOP	29 GAS STATION	43 YARD	23D <input type="checkbox"/> THEFT FROM BUILDING
05 GARAGE/SHED	16 FINANCIAL INSTITUTION	30 AUTO SALES LOT	44 CONSTRUCTION SITE	23E <input type="checkbox"/> THEFT FROM COIN-OP MACH.
PUBLIC ACCESS BLDGS.	17 BARBER/BEAUTY SHOP	31 JEWELRY STORE	45 LAKE/WATERWAY	23F <input type="checkbox"/> THEFT FROM MOTOR VEH.
06 TRANSIT FACILITY	18 HOTEL/MOTEL	32 CLOTHING STORE	46 FIELD/WOODS	23G <input type="checkbox"/> MOTOR VEH PARTS/ACCES.
07 GOVERNMENT OFFICE	19 DRY CLEANERS/LAUNDRY	33 DRUGSTORE	47 STREET	240 <input type="checkbox"/> THEFT OF MOTOR VEHICLE
08 SCHOOL	20 PROFESSIONAL OFFICE	34 LIQUOR STORE	48 PARKING LOT	23H <input type="checkbox"/> OTHER
09 COLLEGE	21 DOCTOR'S OFFICE	35 SHOPPING MALL	49 PARK/PLAYGROUND	SUSPECTED OF USING
10 CHURCH	22 OTHER BUSINESS OFFICE	36 SPORTING GOODS	50 CEMETERY	A <input type="checkbox"/> ALCOHOL
11 HOSPITAL	23 AMUSEMENT CENTER	37 GROCERY/SUPERMARKET	51 PUBLIC TRANSIT VEHICLE	D <input type="checkbox"/> DRUGS
	24 RENTAL STORAGE FACILITY	38 VARIETY/CONVENIENCE	52 OTHER OUTSIDE LOCATION	C <input type="checkbox"/> COMPUTER EQUIP.
	25 OTHER COMMERCIAL SERVICE LOC.	39 DEPARTMENT STORE	77 OTHER	N <input type="checkbox"/> NOT APPLICABLE

METHOD OF ENTRY	METHOD OF ENTRY - MOTOR VEHICLE THEFT	METHOD OF ENTRY - BURGLARY/B&E
1 <input type="checkbox"/> FORCE	01 <input type="checkbox"/> MOTOR RUNNING/KEYS IN CAR	ENTRY EXIT ENTRY EXIT ENTRY EXIT
2 <input type="checkbox"/> NO FORCE	02 <input type="checkbox"/> UNLOCKED	1 <input type="checkbox"/> BASEMENT <input type="checkbox"/>
NO PREMISES ENTERED	03 <input type="checkbox"/> DUPLICATE KEY USED	2 <input type="checkbox"/> 1ST FLOOR <input type="checkbox"/>
	04 <input type="checkbox"/> WINDOW BROKEN	3 <input type="checkbox"/> 2ND FLOOR <input type="checkbox"/>
	05 <input type="checkbox"/> TOWED	4 <input type="checkbox"/> OTHER <input type="checkbox"/>
	06 <input type="checkbox"/> HOT WIRE	1 <input type="checkbox"/> DOOR <input type="checkbox"/>
	07 <input type="checkbox"/> SLIM JIM/COAT HANGER	2 <input type="checkbox"/> WINDOW <input type="checkbox"/>
	08 <input type="checkbox"/> TUMBLERS REMOVED	3 <input type="checkbox"/> GARAGE <input type="checkbox"/>
	09 <input type="checkbox"/> COLUMN PEELED	4 <input type="checkbox"/> SKYLIGHT <input type="checkbox"/>
	10 <input type="checkbox"/> IGNITION PEELED	5 <input type="checkbox"/> OTHER <input type="checkbox"/>

METHODS OF OPERATION 89- WHILE OPERATING MOTOR VEH, RECKLESSLY CAUSED SERIOUS HAZ

VICTIM

NO. 1 TOTAL VICTIMS 2 NAME (Last, First, Middle) [REDACTED]  
 ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]  
 EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]  
 AGE/ D.O.B. [REDACTED] 53 SEX [REDACTED] RACE [REDACTED] B ☐ A ☐ HGT 5-6 WGT 145 HAIR SDY EYES BLU  
 OCCUPATION HOMEMAKER SS [REDACTED]  
 RESIDENT 1 ☒ RESIDENT 3 ☐ MILITARY 5 ☐ OTHER  
 STATUS 2 ☐ TOURIST 4 ☐ STUDENT 6 ☐ UNKNOWN

VICTIM TYPE 1 ☒ INDIVIDUAL F ☐ FINANCIAL INSTITUTION P ☐ POLICE OFFICER (IN THE LINE OF DUTY) S ☐ SOCIETY/PUBLIC O ☐ OTHER  
 B ☐ BUSINESS G ☐ GOVERNMENT R ☐ RELIGIOUS ORGANIZATION U ☐ UNKNOWN

VICTIM INJURED? ☒ Y IF INJURED, DESCRIBE INJURIES: SEE ATTACHED MEDIC RUN REPORTS  
 AGG. ASLT/ HOMICIDE CIRCUM VICT. OFF. ST VICTIM LINKED TO OFFENDER NO(S) 001 VICTIM LINKED TO OFFENSE (NO)S 2903-08  
 My signature verifies that the information on this report is accurate and true [REDACTED] DATE [REDACTED] 95

REPORTING OFFICER [REDACTED] BADGE NO. [REDACTED] 95  
 APPROVING OFFICER [REDACTED] BADGE NO. [REDACTED] 95

FOLLOW-UP? ☐ Y ☒ N If yes, follow-up assignment: [REDACTED]

ADDITIONAL SUPPLEMENTS ☐ VICTIM/WITNESS ☐ PROPERTY ☐ STATEMENTS ☒ OTHER ☐ FORM RECEIVED BY: ☐ INVESTIGATION ☐ INTELLIGENCE ☐ RECORDS ☐ SPECIAL COPIES  
 6025-0001  
 6025 11/20/92

## VICTIM/WITNESS SUPPLEMENT

PAGE \_\_\_\_ OF \_\_\_\_

INCIDENT NUMBER [REDACTED]

VICTIM [REDACTED] OFFENSE AGG. VEH. ASSAULT INCIDENT DATE/TIME [REDACTED] 95NO. 2 TOTAL VICTIMS 2 NAME (Last, First, Middle) [REDACTED]

ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

AGE/D.O.B. [REDACTED] SEX M RACE ☒ W ☐ B ☐ A ☐ U HGT 5-8 WGT 140 HAIR BRO EYES BROOCCUPATION STUDENT SSN UNK RESIDENT STATUS ☒ 1 RESIDENT ☐ 3 MILITARY ☐ 5 ☐ OTHER ☐ 6 ☐ UNKNOWNVICTIM TYPE ☒ INDIVIDUAL ☐ FINANCIAL INSTITUTION ☐ POLICE OFFICER (IN THE LINE OF DUTY) ☐ SOCIETY/PUBLIC ☐ OTHER ☐ BUSINESS ☐ GOVERNMENT ☐ RELIGIOUS ORGANIZATION ☐ UNKNOWNVICTIM INJURED? ☒ Y ☐ N IF INJURED, DESCRIBE INJURIES: SEE MEDIC REPORT

AGG. ASLT/HOMICIDE CIR. [REDACTED] VICT. OFF. RELAT. [REDACTED] VICTIM LINKED TO OFFENDER NO(S) [REDACTED] VICTIM LINKED TO OFFENSE (NO)S [REDACTED]

FOR DEPT. USE ONLY

My signature verifies that the information in this report is accurate and true [REDACTED] Date [REDACTED] 95

NO. [REDACTED] TOTAL VICTIMS [REDACTED] NAME (Last, First, Middle) [REDACTED]

ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

AGE/D.O.B. [REDACTED] SEX M RACE ☒ W ☐ B ☐ A ☐ U HGT [REDACTED] WGT [REDACTED] HAIR [REDACTED] EYES [REDACTED]OCCUPATION [REDACTED] SSN [REDACTED] RESIDENT STATUS ☐ 1 RESIDENT ☐ 3 MILITARY ☐ 5 ☐ OTHER ☐ 6 ☐ UNKNOWNVICTIM TYPE ☐ INDIVIDUAL ☐ FINANCIAL INSTITUTION ☐ POLICE OFFICER (IN THE LINE OF DUTY) ☐ SOCIETY/PUBLIC ☐ OTHER ☐ BUSINESS ☐ GOVERNMENT ☐ RELIGIOUS ORGANIZATION ☐ UNKNOWNVICTIM INJURED? ☐ Y ☐ N IF INJURED, DESCRIBE INJURIES: [REDACTED]

AGG. ASLT/HOMICIDE CIR. [REDACTED] VICT. OFF. RELAT. [REDACTED] VICTIM LINKED TO OFFENDER NO(S) [REDACTED] VICTIM LINKED TO OFFENSE (NO)S [REDACTED]

FOR DEPT. USE ONLY

My signature verifies that the information in this report is accurate and true [REDACTED] Date [REDACTED]

NO. [REDACTED] NAME (Last, First, Middle) [REDACTED] AGE/D.O.B. [REDACTED] SSN [REDACTED]

ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

STATEMENTS OBTAINED ☐ Y ☐ N TYPE ☐ WRITTEN ☐ ORAL ☐ TAPED ☐ OTHER

NO. [REDACTED] NAME (Last, First, Middle) [REDACTED] AGE/D.O.B. [REDACTED] SSN [REDACTED]

ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

STATEMENTS OBTAINED ☐ Y ☐ N TYPE ☐ WRITTEN ☐ ORAL ☐ TAPED ☐ OTHER

NO. [REDACTED] NAME (Last, First, Middle) [REDACTED] AGE/D.O.B. [REDACTED] SSN [REDACTED]

ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

STATEMENTS OBTAINED ☐ Y ☐ N TYPE ☐ WRITTEN ☐ ORAL ☐ TAPED ☐ OTHER

NO. [REDACTED] NAME (Last, First, Middle) [REDACTED] AGE/D.O.B. [REDACTED] SSN [REDACTED]

ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

EMPLOYER NAME AND ADDRESS (Street, Apt., City, State, Zip) [REDACTED] PHONE [REDACTED]

STATEMENTS OBTAINED ☐ Y ☐ N TYPE ☐ WRITTEN ☐ ORAL ☐ TAPED ☐ OTHERREPORTING OFFICER [REDACTED] BADGE NO. [REDACTED] DATE [REDACTED] 95

APPROVING OFFICER [REDACTED] BADGE NO. [REDACTED] DATE [REDACTED]

See [redacted] - 95

[redacted] 1995

To Whom It May Concern;

For further information concerning report # [redacted] you may  
contact the [redacted]

Records Section

Dear [REDACTED],

The National Highway Traffic Safety Administration (NHTSA) under the authority of the U.S. Department of Transportation is conducting a research investigation into a two vehicle crash which occurred on [REDACTED], 1995 at 8:23 P.M. on [REDACTED] in the [REDACTED]. Two of the participants in the crash, [REDACTED] and her thirteen year old son [REDACTED] were transported from the scene and admitted to your medical facility. This investigation is particularly important to the NHTSA due to the presence of front seat air bags which deployed during the crash.

[REDACTED] is under contract with the NHTSA to conduct this investigation and in this capacity we need to obtain copies of the medical records for [REDACTED] and [REDACTED] which identify injuries they suffered in the crash. The following records are requested:

- Discharge Summary
- Emergency Room Record
- Surgical Records
- Pre-operative Radiology Reports
- Medical Consultation Reports
- Any additional record(s) which identify patient injury (e.g., pertinent nurses notes, etc.)

COPIED BY

[REDACTED] 1995

Enclosed are two signed Medical Release Forms from [REDACTED] as required by your medical facility. You should be aware that NHTSA's interest in this crash resides with the effectiveness of applicable Federal Motor Vehicle Safety Standards and not with passenger identification. Federal law requires the exclusion of personal identifiers from investigative reports to protect the privacy of the crash victim.

Thank you for your cooperation and support. It was a pleasure speaking with one of your colleagues, [REDACTED], on [REDACTED], 1995 concerning this matter.

If you have any questions, please call me at [REDACTED]. The copies can be mailed to [REDACTED], "Attention: [REDACTED], Accident

Research "RECORDS REQUEST"

<input type="checkbox"/> FS	<input type="checkbox"/> EKG	<input type="checkbox"/> PRENATAL
<input type="checkbox"/> DS	<input type="checkbox"/> EEG	<input type="checkbox"/> L & D
<input type="checkbox"/> H & P	<input type="checkbox"/> X-RAY	<input type="checkbox"/> PSYCH
<input type="checkbox"/> ER	<input type="checkbox"/> [REDACTED]	<input type="checkbox"/> PT
<input type="checkbox"/> OPE	<input type="checkbox"/> [REDACTED]	<input type="checkbox"/> [REDACTED]
<input type="checkbox"/> PAT	<input type="checkbox"/> PROGS	<input type="checkbox"/> HEAT SUM
<input type="checkbox"/> LABS	<input type="checkbox"/> N/NOTES	<input type="checkbox"/> OTHER
<input type="checkbox"/> X-RAY	<input type="checkbox"/> M/D NOTES	

Enclosures

Sincerely, [REDACTED]

RECEIVED  
[REDACTED] 1995

RECEIVED  
[REDACTED] 1995

[REDACTED]

Dear records requester:

We have received your request for medical records maintained by [REDACTED] and, as discussed below, have referred your request to [REDACTED] an independent company, for immediate processing on our premises.

We maintain medical records during a patient's stay so we can provide quality patient care. The primary reason medical records are maintained following discharge is to facilitate the continued medical care of the patient. The records of a patient may be inspected and copied by the patient (in most cases), his physician, and any other person authorized by the patient or by law. Because the expense of copying records diverts time and money from our primary mission of providing health care, we do not provide the service of copying the records you requested, and we do not maintain copy facilities for the public use. To avoid delay and inconvenience to you, however, we have referred your request to our in-house correspondence service, [REDACTED]

Sincerely,

Medical Records

#### A WORD ABOUT [REDACTED]

[REDACTED] is an independent company staffed with medical record professionals that serves a number of hospitals in this area and across the United States. [REDACTED] was conceived as a for-profit company that would help hospitals devote more money to the delivery of health care while providing better service to records requesters. As its contribution to this hospital's delivery of health care, [REDACTED] shares with this hospital a portion of all fees collected for services provided to requesters like you and also provides, without charge, a number of valuable copying and mailing services for this hospital. [REDACTED] is the only medical records copying service recommended by [REDACTED]



## PATIENT REGISTRATION FORM

COUNT NO.

BEST AVAILABLE

M.R. #

SURG DTE:

7/95 09:22N

NAME &amp; ADDRESS, REFERRAL SOURCE, CLINIC CODE - 0007

3NE

BIRTHDATE

1981

AGE

13

PHONE

S.S.N.

000-00-0000

MAIDEN NAME

TYPE

ENT. BY

SEX

RACE

MAR

CTY

C.I.

E

XX

M

O

E

29

DX CODE

P.A.T.

DNSET DATE

CAME BY

PAT. LOC.

OBSERV. PAT.

CTOR

DIAGNOSIS

OBS S/P MVA WITH L CAVICAL FX

COURIER CODE:

NON MVH DR. &amp; ADDR: UNKNOWN AT REG

ACCIDENT TYPE, LOCATION

ACCIDENT DESCRIPTION

ACCIDENT DATE &amp; TIME

AUTO ACC

7/95 09:00PM

PATIENT EMPLOYER, ADDRESS

NOT EMPLOYED

EMPLOYER CODE

EMPLOY STATUS

NOT

UNEMPLOY

NEAREST RELATIVE, ADDRESS, RELATION

PHONE

NEAREST RELATIVE EMPLOYER, ADDRESS

PHONE

RELATIVE'S DOB

REL: FATHER

GUARANTOR NAME, ADDRESS, RELATION

SSN

GUAR. EMPLOYER, ADDRESS, CODES

PHONE

GUAR. DOB

1981

AGE

40

REL:

H

EMPL STATUS

1

OCCUPATION

SUBSCRIBER:

GROUP NAME:

COPAY:

ADDR: P.O. BOX

COMMENTS: NO AT REG

DIAGNOSIS

CODES

left (L) clavicular fracture s/p Motor Vehicle Accident

810.00  
924.01

OPERATIONS AND/OR PROCEDURES:

none

COMPLICATIONS: (A condition which occurs after the patient's admission to ambulatory service area which modified or affects the complaint for which the patient was treated or examined.)

none

CONDITION ON DISCHARGE:

SIGNATURE OF THE ATTENDING ACTS AS COUNTERSIGNATURE OF ALL ORDERS AND PROGRESS NOTES OF THE ATTENDING. SIGNATURE OF THE RESIDENT ACTS AS COUNTERSIGNATURE OF ALL RESIDENT ORDERS AND RESIDENT PROGRESS NOTES. BOTH SIGNATURES TO BE OBTAINED IN THIS MEDICAL RECORD.

CHART COPY

PHYSICIAN'S SIGNATURE

DATE

<b>EMERGENCY</b>		<b>RECORD</b>		MED. REC. NO.		ACCT. NO.		TRANSFER FROM		(2)	
DATE-ARRIVE TIME		ADMITTED RM #		000 CLERK RW		BIRTHDATE		AGE		PHONE	
95 09:22PM						1981		13		000-00-0000	
NAME & ADDRESS, REFERRAL SOURCE, CLINIC CODE				SEX		MAR		RACE		C.I.	
				M		S		O		02	
				PAT. LOC.		OBSERV. PAT.		V.I.P.		ONSET DATE	
						N				75	
				MED. WORK		OUTPAT. AREA		OP. TYPE			
				ETR		E					
DX CODE		CAME BY		ADMITTING DOCTOR				CR CD:			
				UNKNOWN AT REG							
P A T I E N T C H I E F C O M P L A I N T						EVAL FOR INJ					
ACCIDENT TYPE, LOCATION						ACCIDENT DESCRIPTION					
RD						AUTO ACC					
PATIENT EMPLOYER						OCCUPATION					
NOT EMPLOYED						STAT: 3					
						PHONE 000-000-0000					
						EMPLOYER CODE NOT					
						00000-0000					
EMP. ADDRESS						NEAREST RELATIVE EMPLOYER, ADDRESS					
FATHER											
RELATIVE'S DOB / / AGE 0						OCCUPATION					
GUARANTOR NAME, ADDRESS, RELATION						GUAR. EMPLOYER, ADDRESS, CODE ALL					
						PHONE 00000-0000					
GUAR. DOB 1954 40 REL: I						LOE 00 OCCUPATION					
REV CODE: TO PT:											
SUBSCRIBER:						ID#					
GROUP NAME:						EFF DATE: / / AUTH#/LOS:					
GRP#:						COMMENTS:					
ADDR:						00000-0000					

S  
E  
CNOTIFIED  
POLICE  
TIMECORONER  
TimeFAMILY  
Time

9:50P

For and in consideration of services rendered by [REDACTED] I hereby agree to promptly pay [REDACTED] the attending physician and/or their designate, as bills are presented and at its prevailing rates at the time services are rendered. I understand that all charges are due and payable upon discharge. I hereby assign and authorize payment directly to [REDACTED] the attending physicians and/or their designates, of all insurance benefits and guarantee to pay any balance. I/We understand these claims are not settled/closed until after all related insurance payments are received, and if there is a remaining balance, I/We agree to promptly pay the same and forward all insurance benefits received by me for said claims. Should the account become delinquent, I agree to pay interest at the legal rate, from date of discharge. I understand that no action by [REDACTED] shall relieve me of my sole responsibility to fulfill all obligations under any applicable insurance I may have including my obligations to verify insurance coverage and to obtain pre-admission certification. I further understand that as a patient, I may receive service from emergency physicians or specialists who charge separately from [REDACTED]. These physicians or specialists are acting as independent contractors and are not employees of [REDACTED]. Pursuant to Section [REDACTED] of the [REDACTED] you are entitled, upon request, to a list of the usual and customary charges for room and board, and the usual and customary charges for a selected number of x-rays, laboratory, emergency room, operating room, delivery room, physical therapy, occupational therapy and respiratory therapy services.

I hereby consent to and authorize examination and emergency treatment as necessary; I hereby authorize [REDACTED] by this written release to furnish information from the patient's medical record to any insurer, compensation carrier, healthcare facility or other agency which may be providing financial assistance for the patient's care or to any healthcare provider which his/her physician deems necessary to provide for the continuity of the patient's medical care; notwithstanding the above authorization, I do not authorize [REDACTED] to furnish the following information (please list any exclusions, e.g. information regarding drug and alcohol treatment, psychiatric treatment, AIDS, ARC, HIV testing, diagnosis or treatment):

\_\_\_\_\_. This release of information will be effective until revoked in writing.

I certify that the information given by me in applying for payment under title XVIII of the Social Security Act is correct. I authorize any holder of medical or other information about me to release to the Social Security Administration or its intermediary or carriers any information needed for this or a related Medicare claim. I request that payment of authorized benefits be made on my behalf.

Signature (Patient or authorized representative)

Witness

Date

MEDICAL RECORDS

**EMERGENCY AND TRAUMA CENTER  
MEDICAL RECORD**

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/81
MR#: [REDACTED]	PRO DATE:	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE:	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

**CHIEF COMPLAINT:** Motor vehicle accident.

**HISTORY:** This is a 13-year-old, handicapped white male who was a passenger in a motor vehicle accident tonight. He has severe pain in his face and neck. Other members in the automobile accident have been injured very seriously. He is so frightened and mentally handicapped that he cannot give a cogent history at all.

We are unaware other than he is apparently not allergic to any medications. He is not on any current medications. He is now very tearful and scared.

**PHYSICAL EXAM:**

**BACK:** He has no back pain.

**CHEST:** Nontender.

**ABDOMEN:** Soft.

**PELVIS:** Normal.

**NOSE:** No septal hematoma.

**HEAD, EYES, EARS, NOSE AND THROAT:** Face is grossly stable. Mandible is unremarkable. The pupils are equal, round, react to light and accommodation.

**EXTREMITIES:** Normal tone, bulk and strength except for the left knee which is markedly tender.

Cervical spine: He has a deviated *curve* that is to the right. There appears to be good alignment, it may be a congenital abnormality, but he will be maintained in spinal immobilization until CT can secure that.

We will evaluate his left shoulder, CT of his neck and his left knee with x-rays and have him observed and possibly admitted.

**PROVISIONAL DIAGNOSIS:**

see\_page\_3 (next page)

**Dictated but not reviewed before signature**

EILERS

D: [REDACTED]/95

T: [REDACTED]/95 23:57

dlp [REDACTED]

## EMERGENCY TRAUMA CENTER CLINICAL RECORD

TIME 9:15 10:50 pm	TEMP 98.2	P 101	R 20	B.P. 125	LAST TETANUS
WEIGHT					PATIENT NAME
LMP					PHYSICIAN
NURSE TRIAGE TIME 9:15 p					BIRTHDATE
E.D. Dr. FIRST SEES PT.					SEX
E.D. Dr. DISCH. TIME					DATE
TIME Pt. LEAVES E.D.					

ALLERGIES

?

TRIAGE

13 y.o. mentally handicapped child involved in auto accident. Deformity noted of shoulder. Bruises on nose abrasion to R foot area. Difficult to ascertain extent of head injury due to mental handicap.

SIGNIFICANT PAST HX

CURRENT MEDS

mentally handicapped.

NURSING NOTES

10:00 Student RN has been to pt while waiting for X-ray. Denies injury, but is scared & needs someone to hold him. Skn and Resp. unlabored. Keeps asking for mother. N. Sweet  
10:00 Moved to 17. CT will be done.  
10:30 CT Scan Done. Neighbor - a child now. Spoke to child earlier about his mother being here. Told child his aunt would be here and his dad was with his sisters.  
10:40 Aunt here & patient IV started by [redacted] Child reported L knee hurting.  
11:00 More X-rays done. Resp. even unlabored. Skin warm & dry. Asking questions over door.  
11:00 To + from CT child still asking questions.  
11:00 Arm sling applied L arm.

PROVISIONAL DIAGNOSIS:

acute L Clavicle Fracture, Head Contusion

EKG	TRAUMA LAB	SERUM ICON	ACCUCHECK	ABG
H&H	COAGULATION PROFILE	CERVICAL G.C. CULTURE	MONITOR	NPO
CBC & DIFF	DILANTIN LEVEL	CHLAMYDIA CULTURE	O <sub>2</sub> L/MIN/CANNULA	0.5 cc T.D. 1M
AMYLASE	THEOPHYLLINE LEVEL	STREP SCREEN	PELVIC	GASTRIC LAVAGE
RENAL PANEL	BLOOD ALCOHOL LEVEL	OLD RECORDS & CLINICAL RECORDS	TILT TEST	PULSE OXIMETRY
SUPER 17	SERUM DRUG SCREEN	URINALYSIS	VISUAL ACUITY	
CICU LAB		URINE ICON	V.S. OR CC q. HR	
DIG. LEVEL		URINE DRUG SCREEN		
X RAY	CERVICAL SPINE	L & R KNEE	L & R HIP	
CHEST PA & LAT	ABD SERIES	L & R ANKLE	PELVIS	
CHEST PORT	KUB	L & R FOOT	HEAD CT W/O CON.	
SKULL		L & R WRIST		

② Clav. ② Shoulder ② Arm (102) (104) (105)

Left knee (02)  
Right knee (15)  
Pelvis film (16)

④ IV Normal at 100cc/hr Done Request

DISPOSITION ☐ DISCHARGED ☐ ADMITTED ROOM NO. ☐ ADMITTING OBSERVATION STATUS ☐ ADMITTING NOTIFIED

TIME 3:50 PM  
TIME  
TIME

CONDITION AT TIME OF DISCHARGE OR TRANSFER

☐ GOOD ☐ FAIR ☐ POOR ☐ CRITICAL

CHART

EMERGENCY

RECORD

BEST AVAILABLE

PRESCRIPTIONS

LABS

WBC: \_\_\_\_\_

Hbg/Hct: \_\_\_\_\_

Lytes, Na \_\_\_\_\_

CL \_\_\_\_\_

K \_\_\_\_\_

CO<sub>2</sub> \_\_\_\_\_

BUN: \_\_\_\_\_

CR: \_\_\_\_\_

GLU: \_\_\_\_\_

ABG's

#1

#2

PEFR

pH

1.

pCO<sub>2</sub>

2.

HCO<sub>3</sub>

3.

PO<sub>2</sub>O<sub>2</sub> SATE. D. HISTORY AND PHYSICAL SEE DICTATED H & P ON PAGE 2

EKG IMPRESSION \_\_\_\_\_

X-RAY IMPRESSION \_\_\_\_\_

ATTENDING/CONSULTANT: \_\_\_\_\_

Attending  
Physician  
Signature95  
09:22PM

Signature for History and Physical and Documentation for Pages 1,2,3.

NAME, LAST

FIRST

INIT.

DATE OF BIRTH

1981

AGE

13

SEX

M

MAR

ACCT. NO.



CALL REC'D <input checked="" type="checkbox"/>					AGENCY/PERSON <input checked="" type="checkbox"/> WAITING PATIENT <input type="checkbox"/>				
BLS TO SCENE					HOSPITAL USE ONLY				
ALS TO SCENE <u>2035</u>					ER#				
BLS AT SCENE					ADMIT#				
ALS AT SCENE <u>2041</u>					DIAGNOSIS				
TC HOSPITAL <u>2054</u>					DISPOSITION				
AT HOSPITAL <u>2012</u>					<input type="checkbox"/> DER				
IN SERVICE					<input type="checkbox"/> DOA				
AT QUARTERS					<input type="checkbox"/> HOLDING				
					<input type="checkbox"/> LAMA				
					<input type="checkbox"/> NOT SEEN				
					<input type="checkbox"/> T/A				
					<input type="checkbox"/> T/R				
					<input type="checkbox"/> TRANSFER				

TIME	BIP	PULSE	RESP	AVPU	MONITOR RHYTHM
2101	120/80	90	2Y	A	
2108	120/80	92	2Y	A	

START	FINISH	TOTAL

RUN TYPE ☐ EMERGENT ☒ NON-EMERGENT ☐ SCHEDULED/TRANSFER ☐ NO REMOVAL

SEVERITY OF CONDITION: ☒ MINOR ☐ SERIOUS ☐ CRITICAL ☐ APPARENT DOA

COMMUNICATIONS: ☐ TELM ☒ BLS ☐ ALS ☐ PHONE ☐ DISPATCH

CHIEF COMPLAINT/ASSESSMENT PT was found lying on ground. PT was perine in front of entrance to school on air bag did deploy very heavy drag to front + left side cause PT has priors pain more blood from lip + nose left shoulder tender swelling possible dislocation. Stomach soft no pain. legs up with swelling PT has head restriction PT ask reports fracture PT lying up at school bus in control. PT slid to back board C-collar + CIB. [redacted] collar is out. PT Relm in vol. PT deliver with at change

SIGNIFICANT HISTORY unknown med.

ALLERGIES unknown

PHYSICIAN unknown

PATIENT	MEDS.	PHYSICAL ASSESSMENT		DRUGS	HOSPITAL CONTACT				
<u>unknown</u>		SKIN	PUPILS	TIME	DRUGS ONLY	DOSE	ROUTE	JUST	
		<input checked="" type="checkbox"/> NORMAL	RESPONSIVE R <u>LL</u>						
		<input type="checkbox"/> CYANOTIC	UNEQUAL R <u>L</u>						
		<input type="checkbox"/> PALE, ASHEN	DILATED R <u>L</u>						
		<input type="checkbox"/> FLUSHED	CONSTRUCTED R <u>L</u>						
		<input type="checkbox"/> DRY	NON-REACTIVE R <u>L</u>						
		<input type="checkbox"/> JAUNDICED	BREATH SOUNDS						
		<input type="checkbox"/> DIAPHORETIC	CLEAR R <u>LL</u>						
		<input type="checkbox"/> COOL	RALES R <u>L</u>						
		<input type="checkbox"/> WARM	WHEEZES R <u>L</u>						
		DIMINISHED R <u>L</u>							
		ABSENT R <u>L</u>							

SUSPECTED NATURE OF PROBLEM

<input type="checkbox"/> ABDOMINAL PAIN	<input type="checkbox"/> CARDIAC	<input type="checkbox"/> MULTIPLE TRAUMA	<input type="checkbox"/> SPINAL CORD
<input type="checkbox"/> ALCOHOL-RELATED	<input type="checkbox"/> DEAD ON ARRIVAL	<input type="checkbox"/> ( ) BLUNT ( ) PENETRATING	<input type="checkbox"/> STABBING
<input type="checkbox"/> ALLERGIC REACTION	<input type="checkbox"/> DIABETIC	<input type="checkbox"/> OB/GYN	<input type="checkbox"/> STROKE
<input type="checkbox"/> ANXIETY	<input type="checkbox"/> FEVER	<input type="checkbox"/> OVERDOSE	<input type="checkbox"/> SUICIDE ATTEMPT
<input type="checkbox"/> ASSAULT	<input type="checkbox"/> FRACTURE/SPRAIN	<input type="checkbox"/> POISONING	<input type="checkbox"/> UNCONSCIOUSNESS
<input type="checkbox"/> BEHAVIOR DISORDER	<input type="checkbox"/> HEAD INJURY	<input type="checkbox"/> RESPIRATORY	<input type="checkbox"/> WEAKNESS/ PARALYSIS/NUMBNESS
<input type="checkbox"/> BLEEDING/LACERATIONS	<input type="checkbox"/> MULTIPLE COMPLAINTS	<input type="checkbox"/> SEIZURE	<input type="checkbox"/> OTHER
<input type="checkbox"/> BURNS	<input type="checkbox"/> NAUSEA/VOMITING	<input type="checkbox"/> SHOOTING	

JUSTIFICATION CODES: POS = PHYSICIAN ON SCENE, SO = STANDING ORDERS, EDP = ED PHYSICIAN

NAME OR SIGNATURE OF PHYSICIAN: [redacted]

TREATMENT GIVEN		CREW MEMBERS/DESIGNATE A EMT-A	
<input type="checkbox"/> AIRWAY	<input type="checkbox"/> CPR	AA EMT-AA P EMT P D DRIVER O OTHER	
<input type="checkbox"/> ORAL	<input type="checkbox"/> SQUAD		
<input type="checkbox"/> NASAL	<input type="checkbox"/> BY-STANDER		
<input type="checkbox"/> EOA	<input type="checkbox"/> DEFIB/CARDIOVERT		
<input type="checkbox"/> EGTA	<input type="checkbox"/> EXTRICATION		
<input type="checkbox"/> ETT	<input type="checkbox"/> KED/XPI		
<input type="checkbox"/> ORAL	<input type="checkbox"/> SBB		
<input type="checkbox"/> NASAL	<input type="checkbox"/> OTHER		
<input type="checkbox"/> CRICOID	<input type="checkbox"/> ICE PACK		
<input type="checkbox"/> CANNULA	<input type="checkbox"/> IMMOBILIZATION		
<input type="checkbox"/> MASK	<input type="checkbox"/> CERVICAL		
<input type="checkbox"/> MASK W/O BAG	<input type="checkbox"/> EXTRICATE		
<input type="checkbox"/> RFB/AMBU	<input type="checkbox"/> FOAM		
<input type="checkbox"/> POS. PRESSURE	<input type="checkbox"/> ORTHOPED		
<input type="checkbox"/> FLOW RATE	<input type="checkbox"/> PHILLY		
<input type="checkbox"/> BANDAGE	<input type="checkbox"/> SAND BAGS		
<input type="checkbox"/> BURN CARE	<input type="checkbox"/> OTHER		
<input type="checkbox"/> CARDIAC MONITOR			
<input type="checkbox"/> CONTROL BLEEDING			

WHITE-RESCUE SQUAD

YELLOW-HOSPITAL

PINK-EMS COORDINATOR

Date Frequent periodical notations should be made concerning progress of case, complications, etc.

95 SURGERY ADMIT NOTE

13yo mentally handicapped w/↑ restrained front seat passenger involved in MVA. No LOC reported but hard to assess. Pt does not remember accident.

MEDS -  $\phi$

ALL - unknown

PMH - Mentally handicapped from birth, cleft palate, hypoparathyroidism, eye/muscle problems.

SH - Student.  $\phi$  BTOH  $\phi$  tobacco.

PH - noncontrib

ROS -  $\phi$

PE: 98<sup>2</sup> 101 20 125/54

GEN - WD/WN adolescent w/↑ anxious, scared.

HEENT - TM @ clear. @ TM unable to assess. PERIHA, EOTIL. Dried blood from nose.

NECK - supple

CV - tachycardic, otherwise regular

LUNGS - CTR

ABD - (P)BS. Soft. ? diffuse tend to palp.  $\phi$  rebound  $\phi$  guarding.

PELVIS - contusions to both sup. iliac crest regions. Pelvic rock unable to assess  
? pushing on contusions.

EXT - pain  $\bar{c}$  palpation @ elbow region, @ foot. 2+ pulses @, femoral, popliteal.

NEURO - Oriented to person, place. CN 2-12 grossly intact. Good grip.

BACK -  $\phi$  lesions. Tender over paraspinal musculature in lumbar region.

CXR - fx. @ clavicle @ knee  $\rightarrow$  ? osseous shatter Pelvis - NL

C-spine - irreg. odontoid. @ ankle - NL

@ foot - ? prox BPD, metatarsal fx.

CT head @ 16.6 13.4/203

Amylase 14 142/110/15/158 DT 13.3

45/26/08 DIT - 22.7

40.4 78.7/78

CR pending

### IMPL PLAN

SP MVA  $\bar{c}$  @ clavicle fx, ? @ BPD metatarsal fx. ? abdominal findings.  
Do not feel pt has surgical abdomen, but will admit for observation, H&H's. Still  
do @ leg pain - will obtain femur fx film, LIS films. Processed  $\bar{c}$

Date

Frequent periodical notations should be made concerning progress of case, complications, etc.

95

Awake

Surgery

AF vs

Lungs - c/A

Ald - soft

2° survey → (E) 5th Finger pain & tenderness  
(F) foot pain & tendernessA/P ✓ + - rays  
Home today

95

Trauma

History exam done. No new  
injuries noted

95

Surgery

Ald vs

Heart / D/R

Lungs / d/r

Ald / soft

IMP/RAN - stable S/P MVA ± (E) clavicle fx  
D/c today.

P/U Trauma clinic on Tues

**MEDICAL IMAGING REPORT**

PATIENT NAME	MEDICAL IMAGING NO.	MED. REC. NO.	STATION OR BED
	M'		
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	ADDITIONAL REPORT TO:	

1995

LEFT HUMERUS (FOUR VIEWS):

Indication: Multiple trauma.

Findings: The humerus has an intact appearance without evidence of fracture. The humeral head appears to lie in proper position. At the upper edge of the film, the orientation at the AC joint has an unusual appearance. Clinical correlation for the possibility of avulsion of the secondary ossification center from the acromion would be recommended.

LEFT SHOULDER (ONE AP VIEW):

Findings: A fracture of the mid shaft of the left clavicle is shown as on previous films. The secondary ossification center at the acromion appears to lie at a greater distance from the main body of the bone than is usually shown. This may represent a normal variant, however, clinical correlation for the possibility of an avulsion injury would be recommended.

CEREBRAL CT SCAN WITHOUT CONTRAST:

Indication: Multiple trauma.

Findings: Images are examined at bone window settings in addition to the usual brain windows. The bony calvarium has a normal intact appearance without evidence of fracture. There is no sign of acute intracranial hemorrhage. The ventricular system has a normal configuration. There is a symmetric pattern of cortical sulci. No abnormal low density areas of edema or infarction are shown.

IMPRESSION: NEGATIVE.CT SCAN OF THE CERVICAL SPINE WITHOUT CONTRAST:

Indication: Multiple trauma.

Findings: Multiple thin section axial CT cuts were obtained through the skull base into the superior aspect of the third cervical vertebral segment. Images are examined at bone window settings. Sagittal and coronal reconstruction images are examined also. There is no evidence of a fracture. As noted on the plain films, the odontoid has an unusual

CONTINUED ON PAGE TWO

## MEDICAL IMAGING REPORT

PATIENT NAME [REDACTED]	MEDICAL IMAGING NO. [REDACTED] / 81 M	MED. REC. NO. [REDACTED]	STATION OR BED [REDACTED]
ATTENDING PHYSICIAN [REDACTED]	REQUESTING PHYSICIAN [REDACTED]	ADDITIONAL REPORT TO: [REDACTED]	

[REDACTED], 1995

LEFT KNEE (AP AND LATERAL VIEWS):

Indication: Multiple trauma.

Findings: There appears to be a small joint effusion. The epiphyseal plates of the distal femur and proximal tibia and fibula have a normal appearance. I do not identify a definite fracture. On the basis of the joint effusion, however, there would be suspicion for an occult fracture and perhaps it would be advisable to obtain oblique views. Clinical correlation would be helpful also.

LEFT CLAVICLE (ONE VIEW):

Indication: Multiple trauma.

A fracture of the mid shaft of the clavicle is shown. There appears to be some overlapping of the fracture fragments. The scapula also appears displaced inferiorly and the acromioclavicular joint is not well shown. Clinical correlation is suggested.

RIGHT ANKLE (THREE VIEWS):

Indication: Multiple trauma.

Findings: The osseous structures have an intact appearance without evidence of fracture, dislocation or other bony abnormality. The epiphyseal plates of the distal tibia and fibula have a normal intact appearance.

IMPRESSION: NEGATIVE.CERVICAL SPINE (FOUR VIEWS):

Indication: Multiple trauma.

Findings: The cervical vertebrae are in normal alignment without evidence of fracture. There appears to be a congenital variant with the odontoid deviating to the right. I do not identify any lucent fracture lines. Most likely there is associated congenital anomaly of the C1 ring as well. If clinically indicated, this could be evaluated further with CT.

CONTINUED ON PAGE TWO



PATIENT NAME

## MEDICAL IMAGING REPORT

MEDICAL IMAGING NO.

MED. REC. NO.

STATION OR BED

PAGE TWO

ATTENDING PHYSICIAN

REQUESTING PHYSICIAN

ADDITIONAL REPORT TO:

[REDACTED], 1995

LEFT FEMUR (FOUR VIEWS):

The femur does not demonstrate any definite evidence of fracture. The anterior medial mid thigh shows a small radiopaque density that I believe most likely represents a small glass fragment. This may be on the patient's skin or in the subcutaneous fat. It measures approximately 4 mm in diameter.

LUMBAR SPINE (AP AND LATERAL VIEWS):

There appears to be a congenital scoliotic curvature of the lumbar spine. There appears to be lumbarization of the first sacral segment. The superior end plate of the second lumbar vertebral body anteriorly shows some sclerosis consistent with an epiphysitis. There is no sign of an acute fracture, however.

LEFT HAND (THREE VIEWS):

Indication: Multiple trauma.

Findings: The osseous structures have a normal intact appearance. There is no sign of fracture, dislocation or other bony abnormality.

IMPRESSION: NEGATIVE.

AP PORTABLE CHEST:

Indication: Multiple trauma.

Findings: At the superior edge of the film, a fracture of the left clavicle is evident. The patient is slightly rotated toward his right. The cardiac and mediastinal silhouette is within normal limits. No active infiltrates are shown in the lung fields.

AP PELVIS:

Both femoral heads lie in proper position at the acetabula. No definite fractures are shown. The sacrum at its superior aspect appears to show some lumbarization on the right side.

CONTINUED ON PAGE THREE

## MEDICAL IMAGING REPORT

PATIENT NAME [REDACTED]	MEDICAL IMAGING NO. <b>PAGE THREE</b>	MED. REC. NO. [REDACTED]	STATION OR BED [REDACTED]
ATTENDING PHYSICIAN [REDACTED]	REQUESTING PHYSICIAN [REDACTED]	ADDITIONAL REPORT TO: [REDACTED]	

RIGHT FOOT (THREE VIEWS):

Indication: Multiple trauma.

Findings: The osseous structures have a normal intact appearance. There is no sign of fracture or dislocation.

RIGHT FOOT (THREE VIEWS):

Still no definite fracture of the bones of the foot is shown.

[REDACTED] 95

## MEDICAL IMAGING REPORT

PATIENT NAME	MEDICAL IMAGING NO.	MED. REC. NO.	STATION OR BED
	PAGE TWO		
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	ADDITIONAL REPORT TO:	

configuration, deviating toward the patient's right and this represents a congenital variant. No abnormality of the occipital condyles is evident. The C1 ring shows some asymmetry, however, no fracture or bony destruction is shown.

**IMPRESSION:** CONGENITAL VARIATION OF THE ODONTOID WITHOUT SIGN OF BONY INJURY.

1995

CT SCAN OF THE FACIAL BONES WITHOUT CONTRAST:

Indication: Multiple trauma.

Findings: Multiple axial images through the facial bones were obtained and images examined at bone and soft tissue windows. Several of the images are degraded by patient motion. There is not, however, any convincing evidence of facial bone fracture. The paranasal sinuses do not demonstrate any abnormal masses or fluid collections. No abnormality of the orbits is shown.

**IMPRESSION:** NEGATIVE.

/95

PAGE 01		REQUISITION NO.	ACCESSION NO.	I.D.	COLLECTION DATE & TIME	LOG IN DATE	REPORT DATE	& TIME
					95 04:10A	95	95	0605A

REPORT STATUS	TEST	RESULT		UNITS	REFERENCE RANGE	SITE CODE
		IN RANGE	OUT-OF-RANGE			

## CBC W/O DIFFERENTIAL:

WBC		14.4	K/MM3	4.7-11.4	MV
RBC	4.63		M/MM3	4.30-5.80	MV
HGB	13.5		G/DL	13.0-17.0	MV
HCT	39.2		%	39.0-50.0	MV
MCV	84.8		FL	81.0-98.0	MV
MCH	29.1		PG	26.5-33.0	MV
RDW	13.0		%	11.5-15.0	MV
PLT	199		K/MM3	145-400	MV

MV WORK PERFORMED AT

END OF REPORT-

PATIENT NAME		PATIENT ID		ROOM NO.	AGE	SEX	PHYSICIAN
[REDACTED]		[REDACTED]		[REDACTED]	13	M	[REDACTED]
PAGE	REQUISITION NO.	ACCESSION NO.	I.D. #	COLLECTION DATE & TIME	LOG-IN-DATE	REPORT DATE	& TIME
01	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] 95 00:20A	[REDACTED] 95	[REDACTED] 95	0125A

REPORT STATUS	TEST	RESULT	UNITS	REFERENCE RANGE	SITE CODE
FINAL		IN RANGE OUT OF RANGE			

AMYLASE 14 U/L 16 - 124 MV

MV WORK PERFORMED AT [REDACTED] - [REDACTED] ([REDACTED], [REDACTED])

END OF REPORT- [REDACTED]





PATIENT NAME		PATIENT ID		ROOM NO.	AGE	SEX	PHYSICIAN	
[REDACTED]		[REDACTED]		[REDACTED]	13	M	[REDACTED]	
PAGE	REQUISITION NO.	ACCESSION NO.	I.D. #	COLLECTION DATE & TIME		LOG-IN DATE	REPORT DATE	& TIME
01	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] 95 00:20A		[REDACTED] 95	[REDACTED] 95	0125A

PART. THROMBOTIME, ACTIV (APTT),



REPORT STATUS	TEST	RESULT	UNITS	REFERENCE RANGE	SITE CODE
FINAL		IN RANGE OUT OF RANGE			

PARTIAL THROMBOPLASTIN TIME:

PARTIAL THROMBOPLASTIN TIME (AP 22.7 SECONDS 20.0-29.0 MV

MV WORK PERFORMED AT CCL - [REDACTED]

END OF REPORT - [REDACTED]

PATIENT NAME		PATIENT ID		ROOM NO.	AGE	SEX	PHYSICIAN	
					13	M		
PAGE	REQUISITION NO.	ACCESSION NO.	I.D. #	COLLECTION DATE & TIME		LOG-IN-DATE	REPORT DATE	& TIME
01				95 00:20A		95	95	0125A

PROTHROMBIN TIME (PT),

REPORT STATUS	TEST	RESULT		UNITS	REFERENCE RANGE	SITE CODE
		IN RANGE	OUT OF RANGE			

PROTHROMBIN TIME:

PROTHROMBIN TIME	13.3	SECONDS	10.9-13.8	MV
CONTROL MEAN	12.5	SECONDS		MV
INR	N/A		2.0-3.5	MV

\*REAGENT CHANGE FOR PROTHROMBIN TIMES, EFFECTIVE [REDACTED], 1995.

REVISED NORMAL RANGE = 10.9 - 13.8 SECONDS

REVISED THERAPEUTIC RANGE = 17.7 - 24.0 SECONDS

NOTE: THOUGH THE PROTHROMBIN TIMES AND PROTHROMBIN TIME RATIOS ARE SLIGHTLY INCREASED OVER PREVIOUS VALUES, THE INR RESULT IS NOT AFFECTED BY THE REAGENT CHANGE.

MV WORK PERFORMED AT [REDACTED] HOSPITAL [REDACTED], [REDACTED]  
[REDACTED], DIRECTOR  
END OF REPORT- [REDACTED]

PATIENT NAME		PATIENT ID		ROOM NO.	AGE	SEX	PHYSICIAN
01					13	M	
PAGE	REQUISITION NO.	ACCESSION NO.	ID	COLLECTION DATE & TIME	LOG-IN DATE	REPORT DATE	& TIME
01				95 00:20A	95	95	0224A

(COMPLETE &amp; )

REPORT STATUS	TEST	RESULT		UNITS	REFERENCE RANGE	SITE CODE
		IN RANGE	OUT-OF-RANGE			
	WBC		16.6	K/MM3	4.7-11.4	MV
	RBC	4.71		M/MM3	4.30-5.80	MV
	HGB	13.4		G/DL	13.0-17.0	MV
	HCT	40.4		%	39.0-50.0	MV
	MCV	85.7		FL	81.0-98.0	MV
	MCH	28.4		PG	26.5-33.0	MV
	RDW	13.3		%	11.5-15.0	MV
	PLT	203		K/MM3	145-400	MV
	ABS NEUT		14.3	K/MM3	2.7-8.1	MV
	ABS LYMPH	1.6		K/MM3	1.1-4.0	MV
	ABS MONO	0.7		K/MM3	0.3-1.1	MV
	ABS EOS	0.0		K/MM3	0.1-0.5	MV
	ABS BASO	0.0		K/MM3	0.0-0.2	MV
	NEUTROPHILS		78	%	42.0-76.0	MV
	BANDS	7		%	0.0-10.0	MV
	LYMPHS		11	%	14.0-51.0	MV
	MONOS	4		%	4.0-10.0	MV
	EOS		0	%	0.5-7.0	MV
	BASOS		0	%	0.4-2.0	MV
	MYELO	0		%	0.0-0.0	MV
	NRBC	0		/100 WBC	0	MV
COMMENTS						MV

\*TOXIC GRANULATION - NOTED.

MV WORK PERFORMED AT - ( )

DIRECTOR

END OF REPORT-

# CUMULATIVE REPORT

BEST COPY AVAILABLE

Patient: [REDACTED] Admitted: [REDACTED] 95 Date: [REDACTED] 95  
 Id No: [REDACTED] Age: [REDACTED] Sex: [REDACTED] Time: 11:31 PM  
 Care Area: [REDACTED] Bed: [REDACTED] Physician: [REDACTED] Page: 1

## HEMATOLOGY - COMPLETE BLOOD COUNT

Partial report for this group beginning [REDACTED] 95.

	A	B	C	D	E		
Date:	[REDACTED]	[REDACTED]	[REDACTED]			Normal	
Time:	10:40A	04:10P	00:20A			Range:	Units:
WBC	10.3	14.4 H	16.6 H			4.7-11.4	K/MM3
RBC	4.52	4.63	4.71			4.30-5.80	M/MM3
HGB	12.9	13.5	13.4			13.0-17.0	G/DL
HCT	38.7 L	39.2	40.4			39.0-50.0	%
MCV	85.6	84.8	85.7			81.0-98.0	FL
MCH	28.5	29.1	28.4			26.5-33.0	PG
RDW	14.0	13.0	13.3			11.5-15.0	%
PLT	178	199	203			145-400	K/MM3
ABS NEUTS			14.3 H			2.7-3.1	K/MM3
ABS LYMPH			1.6			1.1-4.0	K/MM3
ABS MONOS			0.7			0.3-1.1	K/MM3
ABS EOS			0.0			0.1-0.5	K/MM3
ABS BASOS			0.0			0.0-0.2	K/MM3
NEUTS			78 H			42.0-76.0	%
BANDS			7			0.0-10.0	%
LYMPHS			11 L			14.0-51.0	%
MONOS			+			4.0-10.0	%
EOS			0 L			0.5-7.0	%
BASOS			0 L			0.4-2.0	%
MYELOS			0			0.0-0.0	%
NRBC			0			0	/100 WBC
NOTES			(302, )				

## FOOTNOTES (HEMATOLOGY - COMPLETE BLOOD COUNT)

302> TOXIC GRANULATION - NOTED.

## COAGULATION - ROUTINE

Partial report for this group beginning [REDACTED] 95.

	A	B	C	D	E		
Date:	[REDACTED]					Normal	
Time:	00:20A					Range:	Units:
PT-PATIENT	13.3					10.9-13.8	SECONDS
PT-CONTRL	12.5						SECONDS
PT-INR	N/A					2.0-3.5	
	(777)						
APTT	22.7					20.0-29.0	SECONDS

Patient: [REDACTED]  
Id No: [REDACTED]  
are Area: [REDACTED]

Age: [REDACTED] Sex: [REDACTED]  
Bed: [REDACTED]

Admitted: [REDACTED] 95  
Physician: [REDACTED]

Date: [REDACTED] 95  
Time: 11:31 PM  
Page: 2

\*\*\*\*\*  
COAGULATION - ROUTINE  
\*\*\*\*\*

Partial report for this group beginning [REDACTED] 95.  
\*\*\*\*\*

FOOTNOTES (COAGULATION - ROUTINE) - - - - -

777> REAGENT CHANGE FOR PROTHROMBIN TIMES, EFFECTIVE [REDACTED] 1995.

REVISED NORMAL RANGE = 10.9 - 13.8 SECONDS  
REVISED THERAPEUTIC RANGE = 17.7 - 24.0 SECONDS

NOTE: THOUGH THE PROTHROMBIN TIMES AND PROTHROMBIN TIME RATIOS  
ARE SLIGHTLY INCREASED OVER PREVIOUS VALUES, THE INR  
RESULT IS NOT AFFECTED BY THE REAGENT CHANGE.



HOSPITAL CUMULATIVE REPORT

BEST AVAILABLE

Patient: [REDACTED] Admitted: [REDACTED] 95 Date: [REDACTED] 95  
 Id No: [REDACTED] Age: [REDACTED] Sex: [REDACTED] Time: 11:31 PM  
 Care Area: [REDACTED] Bed: [REDACTED] Physician: [REDACTED] Page: 3

\*\*\*\*\*  
 \* SERUM CHEM DONE AT [REDACTED] & [REDACTED] \*  
 \* Partial report for this group beginning [REDACTED] 95. \*  
 \*\*\*\*\*

-----A-----B-----C-----D-----E-----

Date:	Time:		Normal Range:	Units:
[REDACTED]	00:20A	GLUCOSE	70-115	MG/DL
		NA	134-149	MEQ/L
		K	3.5-5.3	MEQ/L
		CL	100-110	MEQ/L
		CO2	21-31	MEQ/L
		BUN	5-22	MG/DL
		CREAT	0.5-1.4	MG/DL
		BUN/CR	7-25	
		T PROTEIN	6.4-8.2	GM/DL
		ALBUMIN	3.4-5.0	GM/DL
		GLOBULIN	2.2-3.6	G/DL
		A/G RATIO	0.8-2.0	
		CALCIUM	8.4-10.2	MG/DL
		PHOS	2.2-4.2	MG/DL
		URIC ACID	3.4-7.0	MG/DL
		BILI T	0.1-1.2	MG/DL
		AST	0-37	U/L
		ALT	0-40	U/L
		LDH	117-219	U/L
		ALK PHOS	39-117	U/L
		GGT	11-50	U/L
		AMYLASE	16 - 124	U/L
		CHOL	120-200	MG/DL
		(8031)		
		TRIG	10-190	MG/DL

FOOTNOTES (SERUM CHEM DONE AT [REDACTED] & [REDACTED]) -----

8031>

CHOLESTEROL LEVEL

ASSESSMENT

LESS THAN 200 MG/DL

DESIRABLE

200-240 MG/DL

BORDERLINE HIGH

GREATER THAN 240 MG/DL

HIGH

Patient: [REDACTED] Room: [REDACTED] Date: [REDACTED] 95

CHEMISTRY

Patient: [REDACTED]  
Id No: [REDACTED] Age: 13 Sex: M  
Care Area: [REDACTED] Bed: [REDACTED]

Admitted: [REDACTED] 95 Date: [REDACTED] 95  
Time: 11:31 PM  
Physician: [REDACTED] Page: 4

\*\*\*\*\*  
\* LIPID STUDIES \*

\* Partial report for this group beginning [REDACTED] 95. \*

-----A-----B-----C-----D-----E-----

Date: [REDACTED]  
Time: 00:20A

Normal  
Range: Units:

TRIG 81

10-190 MG/DL

## HOSPITAL CUMULATIVE REPORT

BEST AVAILABLE

\*Patient: [REDACTED] Admitted: [REDACTED] 95 Date: [REDACTED] 95  
Id No: [REDACTED] Age: [REDACTED] Sex: [REDACTED] Time: 11:31 PM  
Care Area: [REDACTED] Bed: [REDACTED] Physician: [REDACTED] Page: 5

\*\*\*\*\*  
\* URINALYSIS - ROUTINE \*

\* Partial report for this group beginning [REDACTED] 95. \*

-----A-----B-----C-----D-----E-----

Date: [REDACTED]  
Time: 00:14A

Normal  
Range: Units:

COLOR	YELLOW		
APPEAR	HAZY		
PH	7.5	4.5-8.0	
SP GR	1.015	1.005-1.03	
ALB	NEG	NEG	
GLUC	NEG	NEG	GM/DL
KETONE	NEG	NEG	
BILE	NEG	NEG	
BLOOD	LARGE	NEG	
UROBIL	NORM	NORM	
NITRIT	NEG	NEG	
LEUK EST	NEG		
WBC	0-4	0-6	/HPF
RBC	>150	0-4	/HPF
CASTS	NOTE		/LPF
A: GRAN CAST: 0-4			
EPI	0-4		/LPF
MUCUS	SMALL		
BACT	0 SEEN		
CRYST	0 SEEN		
NOTES	(5301)		

## FOOTNOTES (URINALYSIS - ROUTINE) -----

5301&gt; PERFORMED IN ETR BY [REDACTED]

END OF REPORT - [REDACTED]

Patient: [REDACTED] Room: [REDACTED] Date: [REDACTED] 95

===== URINE (EXC IEP), STOOL, CSF, MISC FLUIDS =====

Dear [REDACTED]

The National Highway Traffic Safety Administration (NHTSA) under the authority of the U.S. Department of Transportation is conducting a research investigation into a two vehicle crash which occurred on [REDACTED] 1995 at 8:23 P.M. on [REDACTED] in the City of [REDACTED]. Two of the participants in the crash, [REDACTED] and her thirteen year old son [REDACTED] were transported from the scene and admitted to your medical facility. This investigation is particularly important to the NHTSA due to the presence of front seat air bags which deployed during the crash.

Calspan Corporation is under contract with the NHTSA to conduct this investigation and in this capacity we need to obtain copies of the medical records for [REDACTED] and [REDACTED] which identify injuries they suffered in the crash. The following records are requested:

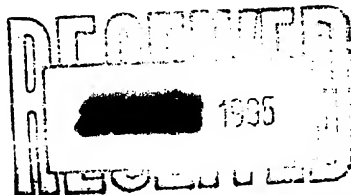
- Discharge Summary
- Emergency Room Record
- Surgical Records
- Pre-operative Radiology Reports
- Medical Consultation Reports
- Any additional record(s) which identify patient injury (e.g., pertinent nurses notes, etc.)

Enclosed are two signed Medical Release Forms from [REDACTED] as required by your medical facility. You should be aware that NHTSA's interest in this crash resides with the effectiveness of applicable Federal Motor Vehicle Safety Standards and not with passenger identification. Federal law requires the exclusion of personal identifiers from investigative reports to protect the privacy of the crash victim.

Thank you for your cooperation and support. It was a pleasure speaking with one of your colleagues, [REDACTED] on [REDACTED] 1995 concerning this matter.

If you have any questions, please call me at [REDACTED]. The copies can be mailed to: Calspan Corporation, P.O. Box 400, Buffalo, New York 14225, "Attention: [REDACTED] Research".

Enclosures



Sincerely,

[REDACTED]  
Crash Reconstructionist/Analyst

☐ COPY  
☐ FAX  
☐ LABEL  
☐ OTHER

[REDACTED]

Dear records requester:

We have received your request for medical records maintained by [REDACTED] Hospital and, as discussed below, have referred your request to [REDACTED] an independent company, for immediate processing on our premises.

We maintain medical records during a patient's stay so we can provide quality patient care. The primary reason medical records are maintained following discharge is to facilitate the continued medical care of the patient. The records of a patient may be inspected and copied by the patient (in most cases), his physician, and any other person authorized by the patient or by law. Because the expense of copying records diverts time and money from our primary mission of providing health care, we do not provide the service of copying the records you requested, and we do not maintain copy facilities for the public use. To avoid delay and inconvenience to you, however, we have referred your request to our in-house correspondence service, [REDACTED].

Sincerely,

Medical Records

#### A WORD ABOUT MED-COR

[REDACTED] is an independent company staffed with medical record professionals that serves a number of hospitals in this area and across the United States. [REDACTED] was conceived as a for-profit company that would help hospitals devote more money to the delivery of health care while providing better service to records requesters. As its contribution to this hospital's delivery of health care, [REDACTED] shares with this hospital a portion of all fees collected for services provided to requesters like you and also provides, without charge, a number of valuable copying and mailing services for this hospital. [REDACTED] is the only medical records copying service recommended by [REDACTED] Hospital.



HOSPITAL

## MEDICAL RECORD FACE SHEET

BEST AVAILABLE

PATIENT		ADMITTING		MISCELLANEOUS	
PATIENT'S NAME	[REDACTED]	N/S	ROOM/	PHYS. SPEC. CO.	
STREET ADDRESS	[REDACTED]	MED/	REC/	FIN	CLASS
CITY	[REDACTED]	ACCT#	[REDACTED]	NAME	ADMIT
PHONE	[REDACTED]	MOTHER'S ACCT#	*****	ADMIT TYPE	PAT LOC
BIRTHDATE	1953 AGE	ADMIT	DATE/TIME	PRIOR	ADMIT
REL/CHURCH		REL INFO	CLERK INIT.		
NEAREST RELATIVE		EMPLOYER CODE		EMPLOY STA	
NAME	[REDACTED]	EMPLOYER		NA	
RELATIONSHIP	HUSBAND	PHONE		000-000-0000	
ADDRESS	[REDACTED]	OCCUPATION			
CITY	[REDACTED]	STATE		ZIP	
PATIENT EMPLOYER		STATE		ZIP	
NAME		NOT EMPLOYED		00000-0000	
ADDRESS				000-000-0000	
ADMITTING DIAGNOSIS		ADMITTING		ADMITTING	
DIAG. MULTIPLE TRAUMA		ADMITTING		ADMITTING	
SURG		DATE		DATE	
D/C FUNC INT		CENSUS INT		ASSEMBLY INT	
COD/TEST		INSTRUMENTS		DRG	
CA INT		FAMILY		DR	
DATE OF DISCHARGE		1995			

PRINCIPAL DIAGNOSIS (THE CONDITION AFTER STUDY THAT WAS RESPONSIBLE FOR ADMISSION)

CODES

multiple fractures  
open right calcaneus fracture  
left tarso-metatarsal fracture-dislocation  
Right Pneumothorax  
Right Chest Wall Contusion  
Scalp laceration  
Right Rib Fractures

825.7  
825.29  
860.0  
922.1  
873.0  
807.03

812.0 E

SECONDARY DIAGNOSIS (ALL COMORBID CONDITIONS OR COMPLICATIONS TREATED DURING THE ADMISSION)

PRINCIPAL OPERATION/PROCEDURE (PROCEDURE MOST RELATED TO PRINCIPAL DIAGNOSIS)

OTHERS (THOSE THAT ARE DONE IN THE O.R., REQUIRED SKILLED PERSONNEL OR CARRY SIGNIFICANT RISK)

CODES-DATES-SURGEONS

Irrigation and debridement of calcaneus, open reduction and internal  
and external fixation of left foot fracture  
Repeat irrigation + debridement of heel wound  
chest tube placement  
Rectus abdominus free flap right foot  
Split thickness skin graft right foot  
Diagnosis: right rib fractures

79.67 2/23  
79.37 2/23  
78.18  
86.22 2/28  
81.13 2/28  
86.69 2/28  
38.38 2/28

FINDINGS &amp; TREATMENT

SIGNATURE OF THE ATTENDING PHYSICIAN ACTS AS COUNTERSIGNATURE OF ALL ORDERS AND  
PROGRESS NOTES OF THE ATTENDING PHYSICIAN. SIGNATURE OF THE RESPONSIBLE OR SENIOR  
RESIDENT ACTS AS COUNTERSIGNATURE OF ALL RESIDENT ORDERS AND RESIDENT PROGRESS  
NOTES OBTAINED IN THIS MEDICAL RECORD.

CONDITION ON DISCHARGE

DISPOSITION & INSTRUCTION  
FOR FOLLOW-UP CARE

DIAG. SENT TO ACCTS.

ATTENDING

PLEASE COMPLETE PRIOR TO DISCHARGE

DATE

EMERGENCY		RECORD		admit		BEST AVAILABLE			
DATE-ARRIVE TIME /95 09:12PM		ADMITTED RM #		MED. REC. NO.		ACCT. NO.		TRANSFER FROM	
NAME & ADDRESS, REFERRAL SOURCE, CLINIC CODE [REDACTED]				BIRTHDATE 13/1953		AGE 41		PHONE [REDACTED]	
SEX M				MAR D		RACE C		PAT. LOC. 02	
OBSERV. PAT. N				V.I.P. [REDACTED]		ONSET DATE [REDACTED] 95		MED. WORK [REDACTED]	
OUTPAT. AREA [REDACTED]				OP. TYPE E		S.S.N. 000-00-0000		[REDACTED]	
OX CODE		CAME BY		ADMITTING DOCTOR 999 UNKNOWN AT REG				CR CD:	
CHIEF COMPLAINT TRAUMA				INFO BY:				[REDACTED]	
ACCIDENT TYPE, LOCATION 1 [REDACTED]		ACCIDENT DESCRIPTION AUTO ACC				ACCIDENT DATE & TIME [REDACTED] /95 09:00PM			
PATIENT EMPLOYER NA		OCCUPATION		STAT:		PHONE 000-000-0000		EMPLOYER CODE 00	
EMP. ADDRESS		OCCUPATION		[REDACTED]		[REDACTED]		[REDACTED]	
NEAREST RELATIVE, ADDRESS, RELATION HUSBAND		PHONE [REDACTED]		NEAREST RELATIVE EMPLOYER, ADDRESS NA		PHONE 00-000-0000		[REDACTED]	
RELATIVE'S DOB / /		AGE 0		OCCUPATION		[REDACTED]		[REDACTED]	
GUARANTOR NAME, ADDRESS, RELATION [REDACTED]		GUAR. EMPLOYER, ADDRESS, CODE ALL		P [REDACTED]		[REDACTED]		[REDACTED]	
GUAR. D [REDACTED] /1954		40 REL: H		LOE 00		OCCUPATION		[REDACTED]	
5-COMMUNITY CHOICE		REV CODE: S		INSURED REL TO PT: H		ID#		[REDACTED]	
SUBSCRIBER:		EFF DATE: / /		AUTH#/LOS:		[REDACTED]		[REDACTED]	
GROUP NAME:		COMMENTS: NC AT REG		[REDACTED]		[REDACTED]		[REDACTED]	
GRP#:		[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]	
ADDR:		[REDACTED]		[REDACTED]		[REDACTED]		[REDACTED]	

S  
E  
C

NOTIFIED	POLICE	CORONER	FAMILY
TIME	TIME	TIME	TIME

For and in consideration of services rendered by [REDACTED], I hereby agree to promptly pay [REDACTED] the attending physician and/or their designate, as bills are presented and at its prevailing rates at the time services are rendered. I understand that all charges are due and payable upon discharge. I hereby assign and authorize payment directly to [REDACTED] the attending physicians and/or their designates, of all insurance benefits and guarantee to pay any balance. I/We understand these claims are not settled/closed until after all related insurance payments are received, and if there is a remaining balance, I/We agree to promptly pay the same and forward all insurance benefits received by me for said claims. Should the account become delinquent, I agree to pay interest at the legal rate, from date of discharge. I understand that no action by [REDACTED] shall relieve me of my sole responsibility to fulfill all obligations under any applicable insurance I may have including my obligations to verify insurance coverage and to obtain pre-admission certification. I further understand that as a patient, I may receive service from emergency physicians or specialists who charge separately from [REDACTED]. These physicians or specialists are acting as independent contractors and are not employees of [REDACTED]. Pursuant to Section [REDACTED] of the [REDACTED] Revised Code you are entitled, upon request, to a list of the usual and customary charges for room and board, and the usual and customary charges for a selected number of x-rays, laboratory, emergency room, operating room, delivery room, physical therapy, occupational therapy and respiratory therapy services.

I hereby consent to and authorize examination and emergency treatment as necessary; I hereby authorize [REDACTED] by this written release to furnish information from the patient's medical record to any insurer, compensation carrier, healthcare facility or other agency which may be providing financial assistance for the patient's care or to any healthcare provider which his/her physician deems necessary to provide for the continuity of the patient's medical care; notwithstanding the above authorization, I do not authorize [REDACTED] to furnish the following information (please list any exclusions, e.g. information regarding drug and alcohol treatment, psychiatric treatment, AIDS, ARC, HIV testing, diagnosis or treatment):

. This release of information will be effective until revoked in writing.

I certify that the information given by me in applying for payment under title XVIII of the Social Security Act is correct. I authorize any holder of medical or other information about me to release to the Social Security Administration or, its intermediary or carriers any information needed for this or a related Medicare claim. I request that payment of authorized benefits be made on my behalf.

Sign (Patient or authorized repre

Witness

Date

MEDICAL RECORDS

**HOSPITAL  
EMERGENCY AND TRAUMA CENTER  
MEDICAL RECORD**

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE:	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE:	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

**CHIEF COMPLAINT:** Automobile accident.

**HISTORY:** This is a 41-year-old female passenger. She was a front seat belted passenger in a serious motor vehicle accident. There were multiple patients injured, some of them very severely. She was brought in by ground medic with only a brief warning prior to her arrival. She is in severe distress and complete spinal immobilization.

**SOCIAL HISTORY:** She does not smoke or drink or take illicit drugs. She lives at home with her family.

**REVIEW OF SYSTEMS:** All her systems are reviewed and are negative.

**FAMILY HISTORY:** Negative for cancer, hypertension, diabetes.

**PHYSICAL EXAM:**

**VITAL SIGNS:** Blood pressure is 140/94, pulse rate 138, respirations 24. She is not grossly febrile. She is in complete spinal immobilization.

**HEAD, EYES, EARS, NOSE AND THROAT:** She has an abrasion on her inner upper lip and complains in head pain. She is maintained in spinal immobilization.

**CHEST:** There is obvious crepitus and there are multiple rib fractures. Breath sounds are present but decreased on the right.

**HEART:** Regular rate and rhythm. No palpable deformity.

**BACK:** Nontender along the thoracic and lumbosacral spines.

**ABDOMEN:** There are bowel sounds but marked guarding.

**PELVIS:** Pelvis is stable.

**GENITOURINARY:** Unremarkable. No vaginal changes are found.

**RECTAL:** Unremarkable.

A Foley catheter was placed without problems. Left foot is markedly tender. The leg is unremarkable. There is an open talus fracture on the right and the patient is turned over to trauma's care. CT shows fluid of peritoneal lavage and a small pneumothorax. PT is 13.6. Urinalysis has 20-40 red cells and large blood. White count is 13. Electrolytes are essentially normal. White count is 18,000, hemoglobin 9.8. Alcohol is

**HOSPITAL  
EMERGENCY AND TRAUMA CENTER  
MEDICAL RECORD**

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

none detected. Amylase is 32. EKG is sinus tachycardia.

**PROVISIONAL DIAGNOSIS:**

Right pulmonary contusion, right rib fractures, open fracture right talus and left metatarsal fracture.

Dictated but not reviewed before signature

EILERS

D: [REDACTED]/95

T: [REDACTED]/95 23:48

dlp [REDACTED]

Continued from Page 2

## EMERGENCY TRAUMA CENTER CLINICAL RECORD

TIME	TEMP	P	R	B.P	LAST TETANUS
					WEIGHT
					LMP
					NURSE TRIAGE TIME
ALLERGIES					E.D. Dr. FIRST SEES PT.
					E.D. Dr. DISCH. TIME
					TIME Pt. LEAVES E.D.

PATIENT NAME

PHYSICIAN

BIRTHDATE

SEX

DATE

## TRIAGE

See trauma flow sheet

SIGNIFICANT PAST HX

CURRENT MEDS

NURSING NOTES

## PROVISIONAL DIAGNOSIS:

Open Fracture @ Tibia, Chest Contusion, Rib Fractures, Pulmonary Contusion, @ Metatarsal Fractures

<input checked="" type="checkbox"/> EKG (10)	<input checked="" type="checkbox"/> TRAUMA LAB	<input checked="" type="checkbox"/> SERUM ICON	<input checked="" type="checkbox"/> ACCUCHECK	<input checked="" type="checkbox"/> ABG
<input checked="" type="checkbox"/> H & H	<input checked="" type="checkbox"/> COAGULATION PROFILE (04/05)	<input checked="" type="checkbox"/> CERVICAL G.C. CULTURE	<input checked="" type="checkbox"/> MONITOR	<input checked="" type="checkbox"/> NPO
<input checked="" type="checkbox"/> CBC & DIFF (01)	<input checked="" type="checkbox"/> DILANTIN LEVEL	<input checked="" type="checkbox"/> CHLAMYDIA CULTURE	<input checked="" type="checkbox"/> O <sub>2</sub> L/MIN/CANNULA	<input checked="" type="checkbox"/> 0.5 cc T.D. 1M
<input checked="" type="checkbox"/> AMYLASE (02)	<input checked="" type="checkbox"/> THEOPHYLLINE LEVEL	<input checked="" type="checkbox"/> STREP SCREEN	<input checked="" type="checkbox"/> PELVIC	<input checked="" type="checkbox"/> GASTRIC LAVAGE
<input checked="" type="checkbox"/> RENAL PANEL	<input checked="" type="checkbox"/> BLOOD ALCOHOL LEVEL (02)	<input checked="" type="checkbox"/> OLD RECORDS & CLINICAL RECORDS	<input checked="" type="checkbox"/> TILT TEST	<input checked="" type="checkbox"/> PULSE OXIMETRY
<input checked="" type="checkbox"/> SUPER 17 (03)	<input checked="" type="checkbox"/> SERUM DRUG SCREEN	<input checked="" type="checkbox"/> URINALYSIS (07)	<input checked="" type="checkbox"/> VISUAL ACUITY	
<input checked="" type="checkbox"/> C/CU LAB		<input checked="" type="checkbox"/> URINE ICON (08)	<input checked="" type="checkbox"/> V.S. OR CC q ____ HR.	
<input checked="" type="checkbox"/> DIG. LEVEL		<input checked="" type="checkbox"/> URINE DRUG SCREEN (09)		
<input checked="" type="checkbox"/> CHEST PA & LAT	<input checked="" type="checkbox"/> CERVICAL SPINE (11)	<input checked="" type="checkbox"/> L & R KNEE	<input checked="" type="checkbox"/> L & R HIP	
<input checked="" type="checkbox"/> CHEST PORT	<input checked="" type="checkbox"/> ABD SERIES	<input checked="" type="checkbox"/> L & R ANKLE (12) (20)	<input checked="" type="checkbox"/> PELVIS (12)	
<input checked="" type="checkbox"/> SKULL	<input checked="" type="checkbox"/> KUB	<input checked="" type="checkbox"/> L & R FOOT (13)	<input checked="" type="checkbox"/> HEAD CT W/O CONTRAST	
		<input checked="" type="checkbox"/> L & R HAND		
		<input checked="" type="checkbox"/> L & R RIBS		
		<input checked="" type="checkbox"/> L & R WRIST		

Priority X-ray and ABG

T & X TV U PRPC X-ray

CXR (17)  
I - spine (18)  
L - spine (19)

@ Tib-fib (21)  
@ Skull (22)

CT Abd/Pelvis w/Contrast (15)  
Pump Spgs 15" for initial assessment

RESIDENT SIGNATURE

ATTENDING PHYSICIAN INITIALS

DISPOSITION

☐ DISCHARGED  
☐ TRANSFER☐ ADMITTED ROOM NO.  
☐ ADMITTING OBSERVATION STATUS  
☒ ADMITTING NOTIFIED

E.D. = Emergency Department

CONDITION AT TIME OF DISCHARGE OR TRANSFER

☐ GOOD ☐ FAIR ☐ POOR ☐ CRITICAL

CHART

TIME  
TIME  
TIME

10:40



EMERGENCY

RECORD

BEST AVAILABLE

PRESCRIPTIONS

LABS

WBC: \_\_\_\_\_

Hgb/Hct: \_\_\_\_\_

Lytes, Na \_\_\_\_\_

CL \_\_\_\_\_

K \_\_\_\_\_

CO<sub>2</sub> \_\_\_\_\_

BUN: \_\_\_\_\_

CR: \_\_\_\_\_

GLU: \_\_\_\_\_

ABG's

#1

#2

PEFR

pH

1.

pCO<sub>2</sub>

2.

HCO<sub>3</sub>

3.

PO<sub>2</sub>O<sub>2</sub> SATE. D. HISTORY AND PHYSICAL ☒ SEE DICTATED H & P ON PAGE 2

EKG IMPRESSION \_\_\_\_\_

X-RAY IMPRESSION \_\_\_\_\_

ATTENDING/CONSULTANT: \_\_\_\_\_

Attending  
Physician  
Signature\_\_\_\_\_/95  
09:12PM

Signature for History and Physical and Documentation for Pages 1,2,3.

NAME, LAST

FIRST

INIT.

DATE OF BIRTH

AGE

SEX

MAR

ACCT. NO.



**Hospital**  
**Regional Trauma Center**  
**TRAUMA ADMISSION**  
**HISTORY & PHYSICAL**  
 Page 1 of 5

Age: \_\_\_\_\_ Sex: \_\_\_\_\_ Race: W Admission Date: 9/25 Admission Time: 9:00 A.M.  
 Referring MD: \_\_\_\_\_ Injury Date: 9/25 Injury Time: \_\_\_\_\_ P.M.  
 Referring Hospital: \_\_\_\_\_ Transport Mode: ☒ Ambulance ☐ Helicopter ☐ Car ☐ Other \_\_\_\_\_

MECHANISM OF INJURY	MVA <input checked="" type="checkbox"/>		MOTORCYCLE <input type="checkbox"/>	GUN SHOT <input type="checkbox"/>	BURN <input type="checkbox"/>	OTHER <input type="checkbox"/>																						
	Single Vehicle	Driver	Scene Fatality	Front Seat	Restrained	Ejected	Rollover	Pedestrian	YES	NO	BICYCLE <input type="checkbox"/>	FALL <input type="checkbox"/>	Distance _____ ft.	ASSAULT <input type="checkbox"/>	Caliber _____	Range _____ ft.	SHOT GUN <input type="checkbox"/>	Gauge _____	Range _____ ft.	STAB WOUND <input type="checkbox"/>	Flame <input type="checkbox"/>	Scald <input type="checkbox"/>	Electrical <input type="checkbox"/>	Chemical <input type="checkbox"/>	Contact <input type="checkbox"/>	Inhalation <input type="checkbox"/>	House Fire <input type="checkbox"/>	FARM RELATED INJURY Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

## HISTORY:

*Wf restrained driver involved in  
 head on mva.*

## PAST MEDICAL HISTORY:

Yes: ☐ No: ☒ If Yes, Explain:

Cardiac	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Pulmonary	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Renal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Diabetes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Neurologic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Vascular	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Trauma	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
Smoking	<input type="checkbox"/>	<input type="checkbox"/>	_____
Etoh/Tox	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other	<input type="checkbox"/>	<input type="checkbox"/>	_____
Surgery	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>C-section x3</i>

None ☐ Unknown ☐

Total Fluids Given Prior To Arrival: \_\_\_\_\_ cc.

Loss Of Consciousness: No ☒ Yes ☐ Duration: \_\_\_\_\_

## MEDICATIONS:

None ☒ Unknown ☐

## ALLERGIES:

None ☒ Unknown ☐

## PHYSICAL EXAM:

INITIAL  
VITAL SIGNS:

B.P. 140/55 RR 28

SECONDARY  
VITAL SIGNS:

B.P. 155/77 RR 20

Intubated: Yes ☐ No ☒

Time 9:40 AM ☒ PM ☐ HR 137

Temp \_\_\_\_\_ Time \_\_\_\_\_ AM ☐ PM ☐ HR \_\_\_\_\_ Temp \_\_\_\_\_

Route: Oral ☐ Nasal ☐

Cricothyroidotomy ☐

Normal: ☒

CRANIO-  
FACIAL:

*3cm transverse laceration occipital scalp*

☒ EARS:

☒ EYES:

☒ NOSE:

☒ ORAL:

**Hospital**  
**Regional Trauma Center**  
**TRAUMA ADMISSION — PAGE 2**  
**History & Physical**

**PHYSICAL EXAM: (Continued)**

Normal:

- ☒ NECK:
- ☐ CHEST: *contusion @ upper chest from belt*
- ☒ HEART:
- ☐ ABDOMEN: *tender ; & distension, soft*
- ☐ BACK:
- ☒ PELVIS: *Contusion @ sup. iliac crest region*
- ☒ RECTUM:
- ☒ GENITALIA:
- ☐ EXTREMITIES: *open wound medial aspect @ talus/calcaneus*

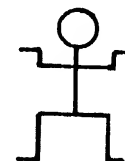
☒ VASCULAR:

	Carotid	Brachial	Radial	Femoral	Popliteal	Pedal
Right:	2+	2+	2+	1+	1+	1+
Left:	2+	2+	2+	1+	1+	1+

☒ NEUROLOGICAL:

Pupils R 3 mm L 3 mm Sensory:

DTR:



**Regional Trauma Center**  
**TRAUMA ADMISSION — PAGE 3**

**History & Physical**

**GLASGOW COMA SCALE:**

**EYE OPENING**

☒ Spontaneously \_\_\_\_\_ 4

☐ To verbal command \_\_\_\_\_ 3

☐ To pain \_\_\_\_\_ 2

☐ No response \_\_\_\_\_ 1

**MOTOR RESPONSE**

☒ Obeys commands \_\_\_\_\_ 6

☐ Purposeful movement (pain) \_\_\_\_\_ 5

☐ Withdraws (pain) \_\_\_\_\_ 4

☐ Flexion (pain) \_\_\_\_\_ 3

☐ Extension (pain) \_\_\_\_\_ 2

☐ None \_\_\_\_\_ 1

**VERBAL RESPONSE**

☒ Oriented \_\_\_\_\_ 5

☐ Confused \_\_\_\_\_ 4

☐ Inappropriate words \_\_\_\_\_ 3

☐ Incomprehensible words \_\_\_\_\_ 2

☐ None \_\_\_\_\_ 1

**Total GCS Points** 15

**REVISED TRAUMA SCORE:**

**GLASGOW COMA SCALE**

☒ 13-15 \_\_\_\_\_ 4

☐ 9-12 \_\_\_\_\_ 3

☐ 6-8 \_\_\_\_\_ 2

☐ 4-5 \_\_\_\_\_ 1

☐ 3 \_\_\_\_\_ 0

**RESPIRATORY RATE**

☒ 10-29 \_\_\_\_\_ 4

☐ > 29 \_\_\_\_\_ 3

☐ 6-9 \_\_\_\_\_ 2

☐ 1-5 \_\_\_\_\_ 1

☐ 0 \_\_\_\_\_ 0

**SYSTOLIC BLOOD PRESSURE**

☒ > 89 \_\_\_\_\_ 4

☐ 76-89 \_\_\_\_\_ 3

☐ 50-75 \_\_\_\_\_ 2

☐ 1-49 \_\_\_\_\_ 1

☐ No pulse \_\_\_\_\_ 0

**Total RTS** 16

**LABORATORY:**

**Ordered:** ☐ CBC

**Results:** 9.8 | 31

18.5

☐ Plts:

☐ PT:

☐ PTT:

**Ordered:** ☐ Electrolytes:

**Results:** Na+ 142 | Cl 104 | BUN 11 | 173 Glu

K+ 3.7 | CO<sub>2</sub> 29 | Cr 0.4

☐ ALK Phos:

☐ AST:

☐ LDH:

☐ Bilirubin:

☐ Amylase: 32

**Ordered:** ☐ ABG

**Results:** pH

pCO<sub>2</sub>

pO<sub>2</sub>

O<sub>2</sub>% sat

Base Excess

**Ordered:** ☒ Urinalysis

**Results:** RBC/mm<sup>3</sup> 20-40

☐ HCG: + —

☐ T & C \_\_\_\_\_ units

OR

☐ Type and Screen

**Ordered:** ☒ DPL

**Results:** No return

Lavage return \_\_\_\_\_ cc

RBC 4600/mm<sup>3</sup>

WBC block/mm<sup>3</sup>

Bilirubin

Amylase

Gram Stain

**Ordered:** ☐ ETOH

**Results:**

☐ Tox Screen

**ECG:** ☐ Normal

☐ Abnormal

**RADIOLOGY**

**PLAIN FILMS:**

ORDERED	NORMAL	INTERPRETATION:
<input checked="" type="checkbox"/> Chest:	<input type="checkbox"/>	<u>multiple (5+) rts</u>
<input checked="" type="checkbox"/> Cervical Spine:	<input checked="" type="checkbox"/>	<u>NT 8-10</u>
<input checked="" type="checkbox"/> Pelvis:	<input checked="" type="checkbox"/>	

**CT SCANS:**

ORDERED	INTERPRETATION:
<input type="checkbox"/> Head:	
<input checked="" type="checkbox"/> Abdomen:	<u>Retained fluid of lavage, otherwise normal. Small pneumothorax on R</u>



**Hospital**  
**Regional Trauma Center**  
**TRAUMA ADMISSION — PAGE 4**

**History & Physical**

BEST AVAILABLE

**Radiology: (Continued)**

**PLAIN FILMS:**

**ORDERED**

**NORMAL**

**INTERPRETATION:**

☒ Thoracic Spine: ☒

☒ Lumbar Spine: ☒

☐ Abdomen: ☐

☐ Facial: ☐

☐ Extremities:  
RUE: ☐

☐ LUE: ☐

☒ RLE: ☐

☒ LLE: ☐  
Foot

☐ Other:  
(specify) ☐

☐ IVP: ☐

*Commited calcaneal fx.*

*Fx metatarsal  
2-5*

**CT SCANS:**

**ORDERED**

**INTERPRETATION:**

☐ Pelvis:

☐ Protocol A

☐ Protocol B

☐ Face:

☐ Spine:

☐ Other:  
(specify)

**ANGIOGRAPHY:**

**LOCATION:**

**INTERPRETATION:**

**PROCEDURES:**

Central Line

Subclavian/internal jugular

R: ☐ L: ☐

Femoral

R: ☐ L: ☐

Cut Down

Saphenous

R: ☐ L: ☐

Other Site \_\_\_\_\_

R: ☐ L: ☐

Nasal Intubation: ☐

Oral Intubation: ☐

Cricothyroidotomy: ☐

CPR: ☐

Chest Tube: R: ☒ L: ☐

Pericardiocentesis: ☐

Thoracotomy: ☐

DPL: ☐

ICP Monitor: ☐

Arterial Line: ☐

Other: ☐

(specify) \_\_\_\_\_

Hospital  
Regional Trauma Center  
TRAUMA ADMISSION — PAGE 5

## History &amp; Physical

## INJURY SUMMARY/PLAN:

1. Multiple trauma
2. (R) Incidental ptx on CT scan
3. (R) Calcaneus fx - open
4. Multiple (R) rib fx & pulmonary contusion
5. (L) Metatarsal fxs
- 6.
- 7.
- 8.

ADMITTING SERVICE: ☐ RED ☒ BLUETrauma Attending Notified ☒ Yes ☐ NoTime 10:15 AM  
P.M.ADMIT TO: ☒ Floor ☐ Morgue☐ ICU ☐ Coroner Notified  
☐ OR

## CONSULT SERVICES:

☐ Neurosurgery M.D. Time A.M.  
P.M.☒ Orthopedics Gabel M.D. Time A.M.  
P.M.☐ Cardiothoracic M.D.☐ Plastic Surgery M.D.☐ Otolaryngology M.D.☐ Ophthalmology M.D.☐ Oral Surgery O.D.☐ Pediatric Surgery M.D.☐ Surgical ICU M.D.☐ Other (specify) M.D.

Physician's Signature

M.D.

Trauma Attending

M.D.

# HOSPITAL

# TRAUMA FLOW SHEET

BEST AVAILABLE - 53

## CHIEF COMPLAINT / MECHANISM

### PROTECTIVE DEVICES:

☒ SEAT BELT ☐ HELMET ☐ NONE  
☐ UNKNOWN ☐ OTHER: \_\_\_\_\_

### MECHANISM:

MVA Head on Collision

### SQUAD:

DATE & TIME OF TRAUMA:

### ALLERGIES:

NALDA

### MEDICATIONS:

φ

### PAST MEDICAL HISTORY:

Denies

### LAST TETANUS:

Unknown

### WEIGHT:

150

### HEIGHT:

5'6"

### LAST PO INTAKE:

6pm

## PREHOSPITAL CARE

CPR ☐ YES ☒ NO

### AIRWAY

☐ CANNULA ☒ MASK  
☐ OT ☐ CRIC  
☐ NT % 100%

### PREHOSPITAL INTAKE

CC

### MAST:

☐ APPLIED ☐ INFLATED  
☐ (R) Leg  
☐ (L) Leg  
☐ ABD

### SPINAL IMMOBILIZATION

☒ CERVICAL COLLAR  
☒ BACKBOARD  
☒ CID

## CLOTHES / VALUABLES CHECK LIST

Underwear Socks/stockings Dentures  
☒ Pants/jeans Shirt/blouse Contacts/glasses  
Skirt/dress Coat/jacket Hearing Aide  
Shoes/boots Other

Cash total \_\_\_\_\_

Credit Cards # \_\_\_\_\_

Jewelry \_\_\_\_\_

Inventoried by \_\_\_\_\_

signature

To Security \_\_\_\_\_

signature

To family \_\_\_\_\_

name

Retained by Pt.:

I, the undersigned, understand that the Miami Valley Hospital does not assume responsibility for, or replace, loss of clothes, personal property, money or valuables kept by patient.

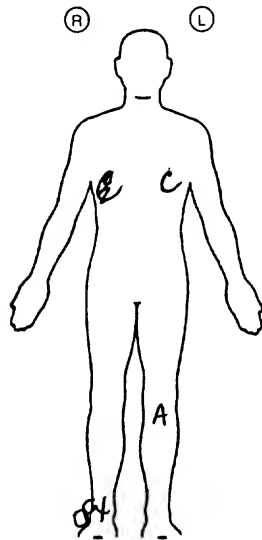
pt signature

### ETC STAFF SIGNATURE

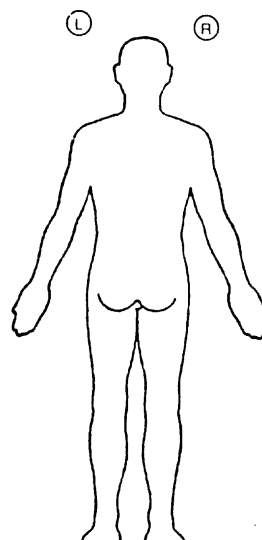
Primary  
Recorder

## TRAUMA TEAM RESPONSE

TRAUMA ALERT <input checked="" type="checkbox"/>	NAME	TIME CALLED	TIME RESPONDED
ETC PHYSICIAN	[REDACTED]	905	
SURGERY			
RESIDENT	[REDACTED]	905	915
CHIEF	[REDACTED]	905	915
ATTENDING	[REDACTED]		
ORTHOPEDIC	[REDACTED]	905	925
NEURO			
ANESTHESIA			



A ABRASION  
B BURN  
C CONTUSION  
L LACERATION  
EN - W ENTRANCE  
EX - W EXIT  
D DEFORMITY



POSTERIOR

ANTERIOR

		MEDICATION
TIME(S)	DRUG	DOSE
	TETANUS DIPHTHERIA	
	GASTROGRAFIN	
2320	Gentamycin 100mg	
2325	Versed 3mg IV	
2338	Demerol 25mg IV	

COMMENTS 935 - Spleint to @ ankle applied via d

TIONS		
TIME(S)	DRUG	DOSE
940	Demerol 5mg	5mg
936 1 p	Ancef 1 gram	1 gram
940	Phenergan 25mg	25mg
2300	Ancef 1 gram	

thotech -  $\Phi$  return on peritoneal lavage:

## EYE OPENING

- 4 = SPONTANEOUSLY  
3 = TO SPEECH  
2 = TO PAIN  
1 = NONE

## VERBAL RESPONSE

- 5 = ORIENTED  
4 = CONFUSED  
3 = VERBALIZES  
2 = VOCALIZES  
1 = NONE

## MOTOR RESPONSE

- 6 = OBEYS COMMAND  
5 = LOCALIZES PAIN  
4 = FLEXION WITHDRAWAL  
3 = ABNORMAL FLEXION  
2 = ABNORMAL EXTENSION  
1 = NONE

## ARMS/LEGS MOTOR

- N = NORMAL  
W = WEAKNESS  
A = ABSENT

## ARMS/LEGS SENSORY

- N = NORMAL  
1 or L = ABNORMAL  
A = ABSENT

## BREATH SOUNDS

- N = NORMAL  
1 = DIMINISHED  
A = ABSENT

## RESPIRATORY EFFORT

- 2 = SHALLOW/ABSENT  
1 = NORMAL

## PUPIL SCALE

1 mm  
2

3

4

5

6

7

8

## HEART SOUNDS

- N = NORMAL  
1 = DIMINISHED  
A = ABSENT

## PULSES

- N = NORMAL  
1 = DIMINISHED  
A = ABSENT

## CAPILLARY REFILL

- 2 = < 2 SECONDS  
1 = > 2 SECONDS  
0 = ABSENT

## BOWEL SOUNDS

- N = NORMAL  
1 = DIMINISHED  
A = ABSENT

BEST AVAILABLE

VITAL SIGNS										NEUROLOGICAL										AIRWAY		CIRCULATORY										ABD.	ABG'S					PULSE OXIMETER	COMMENTS
TIME	TEMP	BP	PULSE	RESP	ARTERIAL	MAP	RHYTHM	EYE OPENING	VERBAL RESPONSE	MOTOR RESPONSE	ARMS MOTOR	LEGS MOTOR	ARMS SENSORY	LEGS SENSORY	PUPILS	BREATH SOUNDS	RESP EFFORT	TRACHEAL DEVIATION	HEART SOUNDS	CAROTID	BRACHIAL	FEMORAL	PEDAL	CAPILLARY REFILL	JVD	CARDIOVERSION DEFIB	BOWEL SOUNDS	PH	CO2	HCO3	PO2	O2 SAT							
915		144/88	144	28	-	-	ST	4	5	6	N	N	N	N	N	N	N	1	(-)	N	N	N	N	N	2	Ø	Ø	+						100%					
930		149/88	145	28	-	-	ST	4	5	6	N	N	N	N	N	N	N	1	(-)	N	N	N	N	N	2	Ø	Ø	+						100%					
940		151/77	137	20	-	-	ST	4	5	6	N	N	N	N	N	N	N	1	(-)	N	N	N	N	N	2	Ø	Ø	+						97%	LOC-T scan				
950		146	120	20			ST	3	4	5																													
1000							ST	3	4	5							2																		In CT scan				
							ST			5																										PACU			
22							ST			5																													
2230		121/80	96	24			ST	2	4	5	N	N	N	N	N	N	2	(-)	N	N	N	N	N	2	Ø		+							98%					
2240		131/81	103				ST	2	3	5																									100%				
1100		121/81	97	20			ST	2	3	5																									100%				
1110		124/77	107	20																																100%			
1120		131/71	90	16																																99			
1130		117/71	85	16																																100			
1140		124/77	97	16																																100			
1150		121/82	97	16			ST	2	3	5																									100%	Not following commands & withdraws to pain			



Presents via machine Awake talking. Reports BACK & chest pain. 2 IV lines started in ER. HAD  
Labs drawn ordered by M.D. [REDACTED] Driver Heard on Accident had 3 children in car with her. One is here.  
other 2 at childrens. Sister here & patient prior to going to OR. Husband needed at childrens for  
daughters. Foley cath yellow urine. Monitor Sinus Rhythm to Tach will in ETP. Transported on gert to  
CT Scan & Back to ER. Chest tube inserted, then transported to OR [REDACTED] TO OR @ 0015 [REDACTED]

BEST AVAILABLE

## DISCHARGE SUMMARY

NAME: [REDACTED]  
MR#: [REDACTED]  
ATTENDING: [REDACTED] M.D.  
ACCOUNT #: [REDACTED]

ADM DATE: [REDACTED]/95 DOB: [REDACTED]  
PRO DATE: [REDACTED] SEX: [REDACTED]  
DIS DATE: [REDACTED]/95 UNIT: [REDACTED]  
VIS TYPE: [REDACTED] ROOM: [REDACTED]

## DISCHARGE DIAGNOSES:

1. Multiple trauma of right open calcaneal fracture, left tarsometatarsal fracture dislocation.
2. Right pneumothorax.
3. Right chest wall contusion.
4. Scalp laceration.
5. Right rib fractures.

## PROCEDURES:

1. Irrigation and debridement of calcaneus.
2. Open reduction, internal fixation, and external fixation of left foot fracture.
3. Repeat irrigation and debridement of right heel wound.
4. Chest tube placement.
5. Rectus abdominous free flap for right foot.
6. Split-thickness skin graft to right foot.
7. Repair of scalp laceration.
8. Diagnostic peritoneal lavage.

**HISTORY & PHYSICAL:** Please refer to the history and physical on the chart for details of her history.

**HOSPITAL COURSE:** The patient was admitted on [REDACTED]/95. She is a 41-year-old white female who was involved in a high speed head-on motor vehicle accident. She was the restrained driver with a lap and chest seat belt. She sustained a right pneumothorax and right-sided chest injury. She was ruled out for significant intraabdominal trauma by peritoneal lavage and CT. She subsequently underwent open reduction and internal fixation of her right calcaneal fracture and left foot fracture. Chest tubes were placed for her right pneumothorax. She was cared for in the Intensive Care Unit but was rapidly transferred to 3-West on the 1st trauma day. The patient was subsequently seen by [REDACTED] in rehab for evaluation of her injuries. On the 1st post trauma day the patient was noted to have positive air leak. She was placed back to wall suction. She was taken back to the operating room on [REDACTED]/95 and underwent irrigation and drainage and dressing changes to her right foot injury. Plastic surgery was consulted for evaluation and coverage of her right foot wound.

On [REDACTED]/95 she went back to the operating room and had repeat irrigation and drainage of her right os calcis fracture. She underwent a subtalar arthrodesis as well as rectus abdominous free flap placement to the wound site. The patient, from a general surgery standpoint, had steady progress. She was continued with aggressive pulmonary toilet. Her chest tube was sealed. It should be noted that postoperatively after placement of her free flap she was cared for in the Intensive Care Unit for a short time.

HOSPITAL

## DISCHARGE SUMMARY

NAME: [REDACTED]  
MR#: [REDACTED]  
ATTENDING: [REDACTED]  
ACCOUNT #: [REDACTED]

ADM DATE: [REDACTED]/95 DOB: [REDACTED]  
PRO DATE: [REDACTED] SEX: [REDACTED]  
DIS DATE: [REDACTED]/95 UNIT: [REDACTED]  
VIS TYPE: [REDACTED] ROOM: [REDACTED]

She was subsequently transferred back out of the Intensive Care Unit. Her chest tube was discontinued. By the 8th post trauma day her scalp staples had been removed. A tertiary exam was done, and no further injuries were identified. She was continued to be followed by plastics, and she was noted to have good healing of her abdominal wound. She was noted to have good blood flow in her free flap. The patient was noted to have some low-grade temperatures, and this was felt to be pulmonary in origin. She was continued on aggressive pulmonary toilet. The patient did complain of some dizziness when shifting from bed position. She was noted to have some fluid behind her right ear drum, and she was started on Entex with subsequent resolution of her dizziness. The patient was started on rehab and transfers. Discharge Planning was asked to evaluate the patient for possibly extended care facility for care of her injuries. The patient had steady progress while on the floor.

She was eventually discharged on [REDACTED]/95. She was discharged to a home. The patient was felt to have adequate assistance and care at home for her wounds while there. She was given instructions to follow up with [REDACTED] and [REDACTED] as well as with routine trauma for further care of her multiple injuries.

At the time of discharge the patient was afebrile, she was tolerating a regular diet, and all her wounds were good. She was discharged on Bactrim for what was thought to be a urinary tract infection.

D: [REDACTED] 95  
T: [REDACTED] 95 21:37

DISCHARGE SUMMARY  
MEDICAL RECORD

HOSPITAL

## CONSULTATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: 3	ROOM: [REDACTED]

DATE OF CONSULTATION: [REDACTED]/95  
CONSULTANT: [REDACTED] M.D.

**HISTORY OF PRESENT ILLNESS:** This patient is a 41-year-old white female with a past history of asthma who was involved in a motor vehicle accident which was a head-on collision tonight. She was a restrained driver. She was transferred by life flight to [REDACTED] Hospital, for which she was seen in the trauma room by the general surgeons. Her other injuries include a scalp laceration and pneumothorax, for which a chest tube is being placed. At the time of orthopedic consultation the patient had been sedated and was able to respond to gross commands very poorly. Upper extremities were palpated at her shoulder, elbow, wrist, and finger joints. There is full range of motion in all these bilaterally. Sensation is intact in 3 nerve distributions in both hands bilaterally. She is actively able to wiggle her fingers and vaguely move her arms around. Forearm bones, humerus, and finger bones were all palpated as well, and no reproducible tenderness was elicited.

Her left leg was palpated at the hip, knee, and ankle joints and revealed no pain. She had no pain to gross palpation of her femur or tibia on the left or right. Her hip joint and her knee joint were not painful to range of motion on the right. She is unable to comply with physical examination. Capillary refill is less than 2 seconds in both feet. There is an approximately 8 cm laceration across the medial aspect just below her medial malleolus, which showed calcaneal bone protruding through this. Thus, it is an open fracture. The patient also has a significant amount of swelling and reproducible pain to palpation over her metatarsal base area in her left foot. The calcaneus is on the right.

**X-RAYS:** X-ray examination reveals her left foot has a highly comminuted divergent type Lisfranc injury. X-ray on the right reveals a comminuted open calcaneus fracture.

**IMPRESSION:**

Grade II open calcaneus fracture, right foot. Divergent comminuted Lisfranc injury on her left foot.

**PLAN:**

Take this patient to surgery tonight. She has received intravenous Ancef 2 gm, and gentamicin 100 mg. She will need to go to surgery to have her open fracture appropriately treated and washed out. At this time also assessment and planning to see what we can do to reconstruct her Lisfranc injury, which may involve percutaneous pinning. External fixation, limited open fixation. She will be admitted to the trauma service. Consult is for [REDACTED]. She does have a small RA scalp laceration, which will need attention in the operating room as well.

CONSULTATION  
MEDICAL RECORD

2793

## CONSULTATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

✓ Appropriate portions of the medical record were reviewed.

— Patient was interviewed and examined.

FREDRICK REEVE, M.D.

D: [REDACTED]/95

T: [REDACTED] 95 00:58

CONSULTATION  
MEDICAL RECORD



HOSPITAL  
DAYTON,  
CONSULTATION

BEST AVAILABLE

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE:	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE:	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

DATE OF CONSULTATION: [REDACTED]/95  
CONSULTANT: [REDACTED]

**HISTORY OF PRESENT ILLNESS:** The patient was the reportedly the unrestrained driver involved in a head-on motor vehicle accident along with other family members apparently, all of whom were injured with a child critical. There was no reported loss of consciousness and initial Glasgow coma scale was 15. Thoracic and lumbar spine films were reportedly normal. The patient suffered right rib fractures, pulmonary contusion with reported pneumothorax seen on CT scan. She suffered an open right calcaneal fracture and left Lisfranc fracture dislocation and second metatarsal head fracture. She is now status post incision and drainage of the calcaneal fracture and open reduction and internal fixation and external fixator fixation on the left. She is medically stable overall as she has been transferred to the floor.

The patient is quite somnolent so details of her past medical and social/functional history are not know. However, the patient was apparently fully independent.

**PAST SURGICAL HISTORY:** Remarkable for cesarean section x 3.

**MEDICATIONS:** None.

**ALLERGIES:** No known drug allergies.

**DIRECTED EXAMINATION:** The patient is seen lying in bed with hips in flexed position and legs elevated. Both legs are Ace wrapped distally. There was good movement of the toes bilaterally. Sensation is intact to light in the toes and the proximal lower extremities. Reflexes are not attempted in the lower extremities. She appears to have good upper extremity strength although she is somewhat somnolent and lethargic. She will be examined further when she is less somnolent.

**ASSESSMENT AND PLAN:** The patient is status post multiple leg fractures including a calcaneal and Lisfranc fracture dislocation. She is quite somnolent at this time. I will have physical and occupation therapy to begin working with her to mobilize her as tolerated and appropriate. In addition as there has been significant injury to her entire family and reported critical injury in a child, I will have rehab psychology see the patient as well. I suspect that she will eventually be a rehab candidate for wheelchair mobility as I suspect she will be nonweightbearing for quite some time.

Thank you very much for this consultation.

CONSULTATION  
MEDICAL RECORD

HOSPITAL  
CONSULTATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

/ Appropriate portions of the medical record were reviewed.

/ Patient was interviewed and examined.

[REDACTED]  
D: [REDACTED]/95  
T: [REDACTED]/95 11:37  
[REDACTED]

## OPERATION

NAME: [REDACTED]

MR#: 95601850

ATTENDING: [REDACTED], [REDACTED]

ACCOUNT #: [REDACTED]

ADM DATE: [REDACTED]/95 DOB: [REDACTED]/53

PRO DATE: [REDACTED] SEX: [REDACTED]

DIS DATE: [REDACTED] UNIT: [REDACTED]

VIS TYPE: [REDACTED] ROOM: [REDACTED]

DATE: [REDACTED]/95

SURGEON: [REDACTED]

ASSISTANT: [REDACTED]

## PREOPERATIVE DIAGNOSIS:

1. Grade II open right calcaneus fracture.
2. Left Lisfranc fracture dislocation.
3. 100% displaced 2nd metatarsal head fracture.

## POSTOPERATIVE DIAGNOSIS:

Same.

## OPERATION:

1. Irrigation and debridement of right os calcis Grade II open fracture.
2. K wire fixation of right os calcis.
3. Open reduction internal fixation of 2nd and 3rd tarsometatarsal joints.
4. External fixation of comminuted cuboid and base of 4th and 5th metatarsal fractures.
5. K wire fixation of displaced 2nd metatarsal neck fracture.

## ANESTHESIA:

General endotracheal.

**INDICATIONS:** The patient is a 41-year-old white female who was involved in a high speed head on motor vehicle accident. She was a restrained driver with a lap and a chest seat belt. She sustained a pneumothorax and right sided chest injury. She had no other obvious orthopedic injuries including normal appearing x-rays of the cervical spine, thoracolumbar and sacral spine, pelvis, hips and knees. She was ruled out for significant intra-abdominal trauma by CT and a peritoneal lavage. She was stabilized for urgent debridement and fixation of both feet.

**PROCEDURE:** The patient was placed on the operating table in the supine position after administration of general endotracheal anesthetic. Preoperatively, she was given gentamicin and Ancef antibiotics. Tourniquets were placed around both proximal thighs but were not inflated throughout the case. The initial case was done with a small debridement set. The fixation set was kept up separate and sterile. The left foot was covered with an impervious stockinette during the procedure for the right

## OPERATION

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NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

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foot. The procedure on the right foot was initiated by copiously irrigating the wound initially with a 3 liter bag of normal saline. It should be mentioned that during the prep procedure, the majority of the body of the os calcis including the entirely posterior facet articulation became dislodged from the fracture, fell into a puddle of iodophor scrub solution was immediately placed in a triple antibiotic solution. The wound was then explored after the initial irrigation. There was found to be intact flexor hallucis longus, flexor digitorum longus, as well as an intact tibial nerve and tibial artery. There was noted to be a laceration disruption of one of the vena comitans which was identified and ligated. The posterior tibial tendon was also found to be intact. The open wound was then further explored. There were found to be no pathology to the undersurface of the talus. There were multiple comminuted fragments from the lateral wall and the tuberosity of the os calcis. At that point, marginal debridement of some of the skin edges was performed. There was found to be no impacted foreign bodies or dirt within the wound. Six more liters were then copiously pulselavaged. At that point antibiotic solution and pulselavage normal saline were used to further clean off the extruded large fragment of bone which was approximately 4 x 4 cm. The bone contained the entire posterior facet as mentioned and could be provisionally reduced underneath the talus. It was very difficult to tell, the relationship to the remaining comminuted medial wall and tuberosity. However, provisional fixation was provided with a K wire placed from the posterior plantar tuberosity across the large fragment and into the undersurface of the talus with excellent purchase. A fluoro scan was then used to document the position of this pin and it was found to be acceptable. At that point, a final irrigation of 1 liter of triple antibiotic solution was accomplished. The wound was then packed with a sterile 4 x 4, copious layering of fluffs and ABDs were then placed on the foot. Webril was then placed around the foot and the foot was then isolated with a sterile draping technique to begin work on the left foot. At that point, all gowns and gloves were changed. The dirty instruments were removed from the room. The new sterile instruments were then used for the first time. At that point, the foot was able to be closed reduced but was very unstable due to the comminution. The foot was checked under the fluoro scan and there was found to be fairly concentric reduction achievable of the 2nd, 3rd, and 4th metatarsal bases on the respective cuneiform and cuboid. It was elected due to the comminution and instability to make a incision directly over the base of the 3rd metatarsal. At this point, a direct visualization of the reduction could be accomplished. Also, copious irrigation was placed into the joint space and multiple flecks of bone and cartilage were removed. The 3 joints were able to be held reduced easily with a K wire and at that point, 3.5 mm screws were placed for a stable rigid reduction. The first screw was placed from the base of the 3rd metatarsal into the intermediate cuneiform.

HOSPITAL

## OPERATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

In the lateral cuneiform, the base of the 2nd was then reduced into the intermediate cuneiform and a 3rd screw was placed from the lateral cuneiform to the base of the 2nd providing excellent rigidity of the midfoot. At that point, an intraoperative x-ray was obtained and showed still some comminution and malalignment and subluxation of the base of the 4th and 5th metatarsals with shortening of the lateral column. At that point, it was elected to place a mini-exfix from the anterior process of the os calcis to the shaft of the 5th metatarsal. This was accomplished with a percutaneous technique with 25 drill bit and the 3.5 mm pins. A small graphite bar was then used to apply a longitudinal traction force and the bar was cinched in with the couplers in this position. Repeat AP and lateral x-rays were obtained and showed much better overall alignment with restored length of the lateral column and distraction of the compressed impacted cuboid fracture. At that point, attention was paid to the displaced 2nd metatarsal neck fracture. A small incision of 3 cm in length was made directly over the 2nd metatarsal head and neck area. The neck fracture was then identified. A K wire was then used to enter the canal of the displaced neck fracture and the K wire was brought out retrogradely through the plantar fat pad. The K wire was then advanced antegradely holding the neck fracture in a reduced position with excellent stability. The pin was bent at a right angle and capped. The wounds were then copiously irrigated with antibiotic saline solution. The skin around the external fix pins was loosely closed with 4-0 nylon. The dorsal midfoot incision and the 2nd metatarsal incision were closed in a similar fashion with interrupted vertical mattress 4-0 nylon suture. The wounds were then dressed with Bacitracin ointment, Adaptic and 4 x 4. The foot was placed in a posterior splint in a neutral position. The patient tolerated the procedure without apparent anesthetic complications and was transported to postoperative recovery room in stable condition.

D: [REDACTED]/95  
T: [REDACTED]/95 15:40



HOSPITAL

## OPERATION

NAME: [REDACTED] ADM DATE: [REDACTED]/95 DOB: [REDACTED] 53  
MR#: [REDACTED] PRO DATE: [REDACTED] SEX: [REDACTED]  
ATTENDING: [REDACTED] DIS DATE: [REDACTED] UNIT: [REDACTED]  
ACCOUNT #: [REDACTED] VIS TYPE: [REDACTED] ROOM: [REDACTED]

DATE:  
SURGEON:

ASSISTANT(S):

## PREOPERATIVE DIAGNOSES:

1. Grade II open right os calcis fracture.
2. Left comminuted Lisfranc fracture dislocation, left foot.

## POSTOPERATIVE DIAGNOSES:

1. Grade II open right os calcis fracture.
2. Left comminuted Lisfranc fracture dislocation, left foot.

## OPERATIONS:

1. Irrigation, debridement, sterile dressing of right Grade II open os calcis fracture.
2. Sterile dressing change under anesthesia of left foot.

## ANESTHESIA:

General endotracheal.

**INDICATIONS FOR PROCEDURE:** The patient is a 41-year-old white female with a history of severe open right os calcis fracture and closed left comminuted Lisfranc fracture dislocation sustained in a high-speed motor vehicle accident. She was initially treated with open reduction/internal fixation and external fixation of the left foot. She had a primary irrigation and debridement and temporary pinning of the right os calcis fracture. It has been elected at this point to perform a dressing change under anesthesia with repeat irrigation, debridement and postirrigation culture.

**PROCEDURE:** The patient was given a general endotracheal anesthetic, placed in supine position on the operating table. The dressing was removed, and the wound inspected by myself and [REDACTED]. There was noted to be no significant duskiness or lack of circulation or frank necrosis about the medial skin flap. The posterior tib. pulse was visibly palpable within the wound. There was no purulence or obvious debris within the wound.

At that point, the foot was prepped and draped in the usual fashion with

HOSPITAL

OPERATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
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ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

scrubbing solution from the toes to the midcalf. At that point with no tourniquet 6 liters of pulse lavage normal saline solution were irrigated throughout the wound. Postirrigation cultures were then obtained. A separate 1-liter bag of triple antibiotic solution was then irrigated throughout the wound. A Betadine-soaked sponge was then loosely packed into the open defect, and a bulky dressing placed around the foot. The foot was then placed in an AO splint in the neutral position.

At that point, the right foot dressing was removed. The wounds were inspected. There was found to be no dehiscence of the wound, no necrosis of the skin edges. There was some serous and bloody drainage around the pin sites, which was expected. The wound was then cleaned with sterile saline and redressed with a Bacitracin Ointment, Adaptic and a posterior bulky splint was then placed on the foot.

The patient tolerated the procedure without apparent complication. She was transported to the postoperative recovery room intubated.

D: [REDACTED]/95  
T: [REDACTED]/95 22:35

OPERATION  
MEDICAL RECORD

HOSPITAL

OPERATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

DATE: [REDACTED]  
SURGEON: [REDACTED]

## PREOPERATIVE DIAGNOSIS:

Grade II open right os calcis fracture.

## POSTOPERATIVE DIAGNOSIS:

Same.

## OPERATION:

1. Irrigation and debridement, open wound, right os calcis.
2. Primary subtalar arthrodesis.

**INDICATION FOR PROCEDURE:** The patient is a 41-year-old white female who is 6 days status post a head-on automobile collision in which she sustained rib fractures and severe bilateral foot injuries. On the right foot she sustained a Grade II open os calcis injury. She has had 2 previous irrigation debridements and a provisional reduction and fixation with a K wire. It has been elected at this point to perform a repeat irrigation and debridement and then a subtalar arthrodesis.

**PROCEDURE:** The patient was given a general endotracheal anesthetic, placed in the supine position on the operating table. The splint and dressing was removed. There was no purulence or erythema about the wound. A tourniquet was placed around the right proximal thigh but was not inflated throughout the case. The foot was then prepped and draped in the usual fashion from below the tourniquet to the toes, with scrub and solution. The belly was also prepped for a possible rectus free flap in the usual sterile fashion as well. At this point the wound was copiously irrigated with 3 liters of pulse lavage normal saline solution. The provisional K wire was removed and discarded.

At that point the large intercalated fragment of the body and posterior facet was removed. A 3.5 mm Schanz pin was then placed in the tuberosity and a more accurate reduction was achieved of the posterior facet fragment under the remaining posterior tuberosity. The new K wire was then repositioned across the subtalar joint and an intraoperative fluoroscan was obtained and showed an excellent restoration of the height of the os calcis, with much better reduction of the posterior facet tuberosity and alignment under the posterior facet of the talus.

At that point the K wire was removed, the intercalated segment of bone was then taken off the field, and again irrigated and cleaned to soft tissues. The cartilage of the posterior facet was then removed from this fragment with a high speed burr of curettes. The surface was then perforated multiple times with a 2.5 mm drill bit through the subchondral bone. At

OPERATION  
MEDICAL RECORD

HOSPITAL

OPERATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

that point the undersurface of the talus was removed of its cartilage under direct visualization with a ring curette and rongeur. The surface of chondral bone was then perforated multiple times with a 2.5 mm drill bit and osteotome was used to fish scale the bottom as well. There was good bleeding, cancellous and subchondral bone exposed in the entire region of the posterior facet.

At that point a reduction was made with the Schanz pin as a joy stick for distraction and length. The cortex remaining from the posterior tuberosity on the intercalated fragment was used to gauge the reduction. Once the reduction had been achieved a temporary K wire was inserted and viewed under the fluoroscan in excellent position, with good reduction of the fragment. At that point the 7-0 cannulated screw guide pins were inserted and checked under the fluoroscan. It was elected at that point to obtain an AP angle and lateral angle x-ray to make certain of the position of the pins in the fragment.

The x-ray showed excellent reduction of the fracture with good position of the intercalated fragment, tuberosity, and posterior facet. The screw lengths were then measured and estimated from the length of the pin. A 75 mm and 65 mm screw were inserted after drilling and found excellent purchase and provided rock solid stability across the joint. X-rays were then obtained and showed that not all of the threads of one of the screws was across the joint. This was then changed to a 75 mm screw. Both screws had excellent purchase and stability. The K wires were then removed.

The final lateral x-ray showed containment of the screws in the body of the talus, with all threads across the intended line of arthrodesis. The wound was then irrigated, and at that point the plastic surgery team of Dr. Barr and Rigano began exploration for a possible local flap rotation, possible free flap coverage of remaining soft tissue defect.

[REDACTED]

D: [REDACTED] 95  
T: [REDACTED] 95 09:51

OPERATION  
MEDICAL RECORD

HOSPITAL  
OPERATION

BEST AND LABLE

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED]/53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: [REDACTED]	ROOM: [REDACTED]

DATE: [REDACTED]  
SURGEON: [REDACTED]

ASSISTANT: [REDACTED]

PREOPERATIVE DIAGNOSIS:

Right leg open os calcis fracture  
with soft tissue defect.

POSTOPERATIVE DIAGNOSIS:

Right leg open os calcis fracture  
with soft tissue defect.

OPERATION:

Right leg posterior tibial artery  
vessel dissection with vein  
anastomosis.

This is a portion of multiple surgeon procedure.

**PROCEDURE:** This portion of the operation was performed after Dr. Gabel performed the open reduction and fixation of the os calcis fracture. Two teams simultaneously operated with one team on the right leg, the other harvesting the rectus abdominis flap muscle. The right lower extremity was elevated and then the tourniquet inflated to 300 mm mercury.

Longitudinal incision was extended from just posterior to the medial malleolus proximally. Posterior tibial artery and vena comitantes were identified and were noted to be lacerated at the level of the medial malleolus, and there were fragments of bone posteriorly. This was debrided. Dissection was carried proximally for about 15 cm. There was no flaw in the distal portion of the posterior tibial artery. Posterior tibial nerve was intact, and posterior tibial tendon was intact.

About 15 cm proximal to the medial malleolus, the posterior tibial artery was noted to have a good pulse; and there were perforators coming off from it. At this level, microvascular dissection was used to isolate the posterior tibial artery and the veins. The artery was in good condition. Adventitia was stripped off from the artery.

At this point the microscope was brought into the field, and adventitia was stripped from around the artery. The deeper vein was isolated. Superficial vein was also isolated just anterior to the medial malleolus along with the saphenous vein. At this point in time, the rectus abdominis muscle was brought into the field, and end-to-side anastomosis from the posterior tibial artery to the rectus abdominis inferior epigastric was performed with 9-0 interrupted Ethilon. A 2.0 MMM vessel cupula was used

OPERATION  
MEDICAL RECORD



HOSPITAL

OPERATION

NAME: [REDACTED]	ADM DATE: [REDACTED]/95	DOB: [REDACTED] 53
MR#: [REDACTED]	PRO DATE: [REDACTED]	SEX: [REDACTED]
ATTENDING: [REDACTED]	DIS DATE: [REDACTED]	UNIT: [REDACTED]
ACCOUNT #: [REDACTED]	VIS TYPE: 5	ROOM: [REDACTED]

to perform an end-to-end anastomosis on the vein at this level. Second venous anastomosis was done end-to-end distally using 9-0 Ethilon.

[REDACTED]

D: [REDACTED] 95  
T: [REDACTED] 95 09:51

OPERATION  
MEDICAL RECORD

**MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT**

**HOSPITAL**

<b>PATIENT NAME</b>	<b>MEDICAL IMAGING #</b>	<b>STATION OR BED #</b>
<b>ATTENDING PHYSICIAN</b>	<b>REQUESTING PHYSICIAN</b>	<b>MEDICAL RECORD #</b>
<b>VISIT TYPE</b>	<b>UNIT</b>	<b>ACCT #</b>
<b>DATE OF BIRTH</b>	<b>SEX</b>	

**DATE OF PROCEDURE**

1995

**CERVICAL SPINE (THREE VIEWS):**

There is a density projected just posterior to the spinous process of C2. This is probably artifactual. A nasogastric tube is noted anteriorly. There is no evidence of acute fracture or subluxation.

**CHEST PORTABLE VIEW 9:45 PM:**

The nasogastric tube is seen passing into the stomach. There is a contusion or infiltrate in the right lung base. There is a small right pleural effusion. No definite pneumothorax is seen. There are right sided rib fractures laterally involving at least the six, seventh and possibly the eighth right ribs. The mediastinum is not significantly widened.

**PORTABLE AP VIEW OF THE PELVIS 9:45 PM:**

There is contrast in the urinary tract. No definite fracture or dislocation is present.

**DORSAL SPINE (AP AND LATERAL VIEWS):**

There is no acute fracture or subluxation. Note is made of right sided rib fractures.

**LUMBAR SPINE (AP AND LATERAL VIEWS):**

There is lipping of the anterior vertebral body of L2. This may represent a small compression fracture. Remaining levels appear normal. There is mild scoliosis with a convex curvature to the left. Note is made of contrast within the kidneys which appear to function bilaterally.

**IMPRESSION:** POSSIBLE COMPRESSION OF L2 WITHOUT SIGNIFICANT SUBLUXATION OR CANAL STENOSIS.

**PORTABLE CHEST 9:45 PM:**

There is increased density in the right lung base which is consistent with a pulmonary contusion. The nasogastric tube is in the stomach. There is no definite pneumothorax. Multiple right lateral rib fractures are again noted. The mediastinum soft tissue shadow is no wider, but there is some indistinctness on the right side laterally which may represent some mediastinal hematoma. Clinical correlation is recommended.

CONTINUED

**MEDICAL IMAGING**

PATIENT RECORD COPY

Page 1

**MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT**

**HOSPITAL** [REDACTED]

<b>PATIENT NAME</b> [REDACTED]	<b>MEDICAL IMAGING #</b> [REDACTED]	<b>STATION OR BED #</b> [REDACTED]
<b>ATTENDING PHYSICIAN</b> [REDACTED]	<b>REQUESTING PHYSICIAN</b> [REDACTED]	<b>MEDICAL RECORD #</b> [REDACTED]
<b>VISIT TYPE</b> [REDACTED]	<b>UNIT</b> [REDACTED]	<b>ACCT #</b> [REDACTED]
<b>DATE OF PROCEDURE</b> [REDACTED], 1995	<b>DATE OF BIRTH</b> [REDACTED] 53	<b>SEX</b> [REDACTED]

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[REDACTED] 1995

LEFT ANKLE:

The distal tibia and fibula as well as the talus appear to be intact. There is some irregularity of the base of the fifth metatarsal. If there is any clinical suspicion for a fracture of the fifth metatarsal base, a foot film would be recommended.

RIGHT TIBIA AND FIBULA:

The tibia and fibula are intact. There is a comminuted fracture of the calcaneus noted.

RIGHT KNEE:

Lateral film is offset, but there is no acute fracture or dislocation.

RIGHT ANKLE 9:45 PM:

There is a severe comminuted fracture of the calcaneus. This involves the mid and anterior portions of the calcaneus. There is a large bony fragment displaced inferiorly. Multiple small fragments are present laterally as well. The distal tibia and fibula appear intact. The talus appears intact as well. The sustentaculum tali is affected by the comminuted fracture.

IMPRESSION: COMMINUTED FRACTURE OF THE CALCANEUS.

LEFT FOOT:

There is a severe fracture of the tarsal metatarsal joints. The first and second tarsal metatarsal joints appear intact. There are fracture-dislocations of the third, fourth and fifth tarsal metatarsal joints with lateral displacement of the metatarsal. There is also a fracture of the heads of the second and third metatarsals. The talus and calcaneus appear intact. The navicular bone appears intact as well. There is a comminuted fracture of the lateral cuboid.

IMPRESSION: SEVERE FRACTURE-DISLOCATION OF THE THIRD, FOURTH AND FIFTH TARSAL METATARSAL JOINTS WITH FRACTURES OF THE SECOND AND THIRD METATARSAL HEADS.

CONTINUED

MEDICAL IMAGING

PATIENT RECORD COPY

MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT

[REDACTED] HOSPITAL [REDACTED]

PATIENT NAME	MEDICAL IMAGING #	STATION OR BED #
[REDACTED]	[REDACTED]	ETR
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	MEDICAL RECORD #
[REDACTED]	[REDACTED]	[REDACTED]
VISIT TYPE	UNIT	ACCT #
[REDACTED]	[REDACTED]	DATE OF BIRTH
[REDACTED]	[REDACTED]	53
[REDACTED]	[REDACTED]	SEX
[REDACTED]	[REDACTED]	[REDACTED]
DATE OF PROCEDURE		
[REDACTED] 1995		

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[REDACTED] 1995

PORTABLE CHEST 11:00 PM:

The pulmonary contusion on the right side is again noted and not significantly changed. Again, there is note made of the multiple right sided rib fractures which involve the fifth, sixth, seventh, eighth and ninth ribs. There is a small lateral pneumothorax. The left lung remains clear. The mediastinum does not appear widened.

PORTABLE CHEST 11:45 PM:

There has been insertion of a right sided chest tube. There is a right pneumothorax which has increased in size. The right sided rib fractures are again noted involving the fifth through ninth ribs. The contusion in the right lung is unchanged. The left lung remains clear.

W. [REDACTED]  
D: [REDACTED]  
T: [REDACTED] 95 (5:11)  
cmc

**MEDICAL IMAGING DEPARTMENT  
CT SCAN REPORT**

**HOSPITAL** [REDACTED]  
**PATIENT NAME** [REDACTED] **MEDICAL IMAGING #** [REDACTED] **STATION OR BED #** [REDACTED]  
**ATTENDING PHYSICIAN** [REDACTED], M.D. **REQUESTING PHYSICIAN** [REDACTED] **MEDICAL RECORD #** [REDACTED]  
**VISIT TYPE** [REDACTED] **UNIT** [REDACTED] **ACCT #** [REDACTED] **DATE OF BIRTH** [REDACTED] 53 **SEX** [REDACTED]  
**DATE OF PROCEDURE** [REDACTED]

[REDACTED] 1995

CT SCAN OF THE ABDOMEN WITH CONTRAST:  
CT SCAN OF THE PELVIS WITH CONTRAST:

There is a small right pneumothorax. Right basilar rib fractures are noted. There is an area of pulmonary contusion at the right base. Small pleural effusions are present as well. Below the diaphragm, there is a moderate amount of peritoneal fluid. Most of the fluid is present in the pelvis. This fluid has a uniform low density. Has the patient had a peritoneal lavage performed? If the lavage has been performed, this would explain the fluid, but if no lavage was performed, a hemoperitoneum must be excluded. There is a small cyst in the right lobe of the liver anteriorly and a two other smaller cysts in the lower right lobe of the liver. Otherwise the liver and spleen are normal. The kidneys function bilaterally and appear normal. The adrenal glands are normal. The pancreas is unremarkable. There is no free abdominal air. There is some prominence of the uterus with areas of low density suggesting uterine fibroid disease.

IMPRESSION:

1. RIGHT LOWER CHEST TRAUMATIC CHANGES WITH SMALL RIGHT PNEUMOTHORAX, RIGHT RIB FRACTURES, RIGHT PULMONARY CONTUSION, AND ATELECTASIS AND PLEURAL FLUID.
2. PERITONEAL FLUID. IF THE PATIENT HAS HAD A PERITONEAL LAVAGE, THIS WOULD EXPLAIN THE FLUID, ESPECIALLY IN THE PELVIS. IF NO LAVAGE HAS BEEN PERFORMED, A HEMOPERITONEUM MUST BE EXCLUDED.
3. HEPATIC CYSTS.
4. NO EVIDENCE OF SOLID ABDOMINAL ORGAN INJURY.
5. PROMINENT UTERUS WITH AREAS OF LOW DENSITY SUGGESTING UTERINE FIBROIDS.

W. [REDACTED]  
 D: [REDACTED]  
 T: [REDACTED]/95 (5:13)  
 cmc



**MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT**

[REDACTED] HOSPITAL [REDACTED]				
PATIENT NAME	MEDICAL IMAGING #		STATION OR BED #	
[REDACTED]	[REDACTED]		-ET [REDACTED]	
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN		MEDICAL RECORD #	
[REDACTED], M.D.	[REDACTED]		[REDACTED]	
VISIT TYPE	UNIT	ACCT #	DATE OF BIRTH	SEX
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED] 53	[REDACTED]

**DATE OF PROCEDURE**

[REDACTED] 1995

**LEFT FOOT (PORTABLE AP AND LATERAL VIEWS IN SURGERY) 3:00 AM:**

A pin has been placed through the fracture of the second metatarsal head. Screws have been placed affixing the tarsal metatarsal joints with good alignment of the tarsal metatarsal joints. On this film, note is made of a comminuted fracture of the cuboid. The fractures of the bases of the third and fourth metatarsals are also noted.

**LEFT FOOT (TWO VIEWS IN SURGERY) 3:45 AM:**

Comparison: Same day, 3:00 AM.

In addition to the aforementioned pins and screws, two external fixation screws have been placed, one in the lateral calcaneus and one into the fourth metatarsal. Alignment of the tarsal metatarsal joints as well as the second metatarsal head fracture appears satisfactory.

**PORTABLE CHEST 6:00 AM:**

There has been insertion of a right sided chest tube. The right pneumothorax is no longer seen. Note again is made of the multiple right rib fractures. The pulmonary contusion on the right side is somewhat smaller. There are small pleural effusions and there is atelectasis in the bases. No other infiltrates are present.

W. [REDACTED]  
D:  
T: [REDACTED]/95 (5:12)  
cmc

MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT

[REDACTED] HOSPITAL [REDACTED], [REDACTED]

PATIENT NAME	MEDICAL IMAGING #	STATION OR BED #		
[REDACTED]	[REDACTED]	[REDACTED]		
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	MEDICAL RECORD #		
[REDACTED]	[REDACTED]	[REDACTED]		
VISIT TYPE	UNIT	ACCT #	DATE OF BIRTH	SEX
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]-53	[REDACTED]
DATE OF PROCEDURE				
[REDACTED] 1995				

PORTABLE CHEST (7:00 AM):

Comparison: [REDACTED]-95.

The pulmonary contusion on the right side is unchanged. There is increased atelectasis or infiltrate at the left base. There is also increase in the bilateral pleural effusions. The multiple right sided rib fractures are again noted. There is no definite right sided pneumothorax.

W. [REDACTED]  
D: [REDACTED]  
T: [REDACTED]/95 (10:24)  
gk

**MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT**

[REDACTED] HOSPITAL [REDACTED]				
PATIENT NAME [REDACTED]	MEDICAL IMAGING #		STATION OR BED # [REDACTED]	
ATTENDING PHYSICIAN [REDACTED] M.D.	REQUESTING PHYSICIAN		MEDICAL RECORD # [REDACTED]	
VISIT TYPE	UNIT	ACCT #	DATE OF BIRTH [REDACTED] 53	SEX [REDACTED]
DATE OF PROCEDURE [REDACTED], 1995				

PORTABLE CHEST (7:00 AM):

Compared to the previous day, chest tube remains in the same location. There is no pneumothorax. Still, bilateral basilar alveolar densities, which are mostly of atelectatic nature, are noted, however in the left base the possibility of pneumonic infiltration is questioned. Old fractured ribs on the right side is noted again.

M. [REDACTED], [REDACTED]  
D: [REDACTED]/95  
T: [REDACTED]/95 (8:57)  
gs

**MEDICAL IMAGING REPORT****PATIENT NAME****MEDICAL IMAGING #****STATION OR BED**

BD: /53

**ATTENDING PHYSICIAN****REQUESTING PHYSICIAN****MEDICAL RECORD #**

, 1995

PORTABLE CHEST: 6:00 a.m.

The examination is compared to one performed yesterday.

The right chest tube remains in place. The obscuring at the left base remains about the same as was seen yesterday. The right-sided fractured ribs are still seen. There is no real pneumothorax.

IMPRESSION: OBSCURING AT THE LEFT SIDE BY FLUID-ATELECTASIS REMAINS ABOUT THE SAME. THE CHEST IS UNCHANGED FROM THE EARLIER EXAMINATION PERFORMED YESTERDAY.

## MEDICAL IMAGING REPORT

PATIENT NAME [REDACTED]	MEDICAL IMAGING NO. [REDACTED]/53 F	MED. REC. NO. [REDACTED]	STATION OR BED [REDACTED]
ATTENDING PHYSICIAN [REDACTED]	REQUESTING PHYSICIAN [REDACTED]	ADDITIONAL REPORT TO: [REDACTED]	

[REDACTED], 1995

PORTABLE CHEST:

Comparison 2/25 earlier.

Endotracheal tube in good position. Right subclavian catheter in SVC. Right chest tube in place. Interstitial and alveolar filling process is seen bilaterally, probably representing a combination of atelectasis and contusion, appearing unchanged from the previous examination allowing for technique. Multiple right rib fractures are again seen.

[REDACTED] 1995

PORTABLE CHEST (7:00 A.M.):

Comparison 2/25.

Tube and catheter position is similar. Infiltrative density is again seen bilaterally representing a combination of atelectasis and contusion, appears slightly worse only on a technical basis.



<b>MEDICAL IMAGING REPORT</b>			
PATIENT NAME [REDACTED]	MEDICAL IMAGING NO. [REDACTED] 53 [REDACTED]	MED. REC. NO. [REDACTED]	STATION OR BED [REDACTED]
ATTENDING PHYSICIAN [REDACTED]	REQUESTING PHYSICIAN [REDACTED]		ADDITIONAL REPORT TO: [REDACTED]

[REDACTED] 1995

INTRAOPERATIVE RIGHT ANKLE:

Intraoperative AP and lateral views were obtained at 9:30 a.m., 9:45 a.m. and 10:30 a.m., and demonstrate a fracture of the calcaneus with placement of K-wires through the heel and traversing the subtalar joint with subsequent placement over the wires of screws for arthrodesis and fixation of the calcaneal fracture.

[REDACTED], 1995

PORTABLE CHEST (6:00 A.M.):

Comparison is made with [REDACTED] 95.

Indication: Multiple trauma.

A single right-sided chest tube is seen in place with mild atelectatic densities and lateral pleural thickening associated with the tube placement and multiple rib fractures. Predominantly lower lung field parenchymal densities and perhaps a small pleural effusion is seen on the left. The right subclavian line is unchanged in position. Overall the appearance is stable compared to the prior study. No definite new abnormalities are seen.

**MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT**

PATIENT NAME [REDACTED]		MEDICAL IMAGING #		STATION OR BED # [REDACTED]	
ATTENDING PHYSICIAN [REDACTED]		REQUESTING PHYSICIAN		MEDICAL RECORD # [REDACTED]	
VISIT TYPE	UNIT	ACCT #	DATE OF BIRTH [REDACTED]-53	SEX [REDACTED]	
DATE OF PROCEDURE					

[REDACTED], 1995

AP PORTABLE CHEST (11:40 AM):

Comparison is made to [REDACTED]-95. The right sided chest tube has been removed since the previous film. No pneumothorax is identified. A right sided subclavian central venous catheter is now located slightly higher within the superior vena cava, but remains in satisfactory position. Multiple right sided rib fractures are again noted. There is localized pleural thickening or loculated pleural fluid along the right lower lateral chest wall. There are hazy bilateral pulmonary infiltrates in both perihilar areas. There is also hazy left basal increased density, probably related to some pleural fluid in this area as well. No other significant abnormalities are noted and there has been no significant change since the previous day.

[REDACTED], 1995

AP PORTABLE CHEST:

Comparison is made to [REDACTED]-95. The right subclavian central venous catheter appears unchanged in position. Multiple right sided rib fractures are again noted with adjacent pleural thickening or loculated pleural fluid. Bilateral pulmonary infiltrates and hazy left basal pleural fluid are also again noted. The overall appearance of the chest has not changed significantly since the previous day.

## MEDICAL IMAGING REPORT

PATIENT NAME	MEDICAL IMAGING NO.	MED. REC. NO.	STATION OR BED
[REDACTED]	[REDACTED] 53 [REDACTED]	[REDACTED]	[REDACTED]
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	ADDITIONAL REPORT TO:	
[REDACTED]	[REDACTED]	[REDACTED]	

[REDACTED], 1995

CHEST (PORTABLE) 7:00 A.M.:

Comparison: [REDACTED]-95.

The left lower lobe infiltrate or contusion and left pleural effusion are unchanged. There are multiple right-sided rib fractures with the right pleural effusion being unchanged as well. There is minor atelectasis in the right base. The central venous line is unchanged in position.

MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT

PATIENT NAME	MEDICAL IMAGING #	STATION OR BED #
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	MEDICAL RECORD #
VISIT TYPE	UNIT	ACCT #
		DATE OF BIRTH
		SEX
DATE OF PROCEDURE		

1995

PORTABLE CHEST 7:00 AM:

Provided history: Multiple trauma.

A single portable view of the chest is compared to the previous portable study dated 95. A right subclavian catheter remains in place with the tip in the region of the superior vena cava. There is persistent hazy opacification of the left lower lung which in part may represent a layering left effusion. There are multiple right rib fractures with hazy opacification at the right lung base which may represent pleural reaction and/or pleural effusion.

IMPRESSION:

1. OVERALL, NO SIGNIFICANT INTERVAL CHANGE.

## MEDICAL IMAGING REPORT

PATIENT NAME	MEDICAL IMAGING NO.	MED. REC. NO.	STATION OR BED
	53 F		
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	ADDITIONAL REPORT TO:	

1995

RIGHT FOOT (THREE VIEWS):

Comparison - 1995.

Plaster cast is identified in place. Two orthopedic screws are fixing a comminuted mid and proximal os calcis fracture while some bony detail is limited, as is visualization of the subtalar joint. Overall alignment appears preserved and relatively anatomic.

**IMPRESSION:** STABLE APPEARANCE OF COMMINUTED OS CALCIS FRACTURE. NO EVIDENCE FOR PROSTHESIS LOOSENING OR MALPOSITION.

LEFT FOOT (TWO VIEWS):

Comparison - 1995.

Screw fixation at the site of tarsal/metatarsal fracture dislocation is identified. There is also wire fixation through the second metatarsal. Overall alignment appears anatomic. Also, presence of the cast limits evaluation. The third through fifth tarsal/metatarsal joints are not well demonstrated, but again overall alignment appears essentially anatomic.



41 yr

Vent. rate 106 BPM  
PR interval 136 ms  
RS duration 80 ms  
QT/QTc 336/446 ms  
P-R-T axes 51 54 48

Room: [REDACTED]  
Loc: 0 Option: 22

Technician ID: [REDACTED]

Meds: Unknown

SINUS TACHYCARDIA

INCREASED R/S RATIO IN V1 CONSIDER TRUE POSTERIOR  
INFARCTION

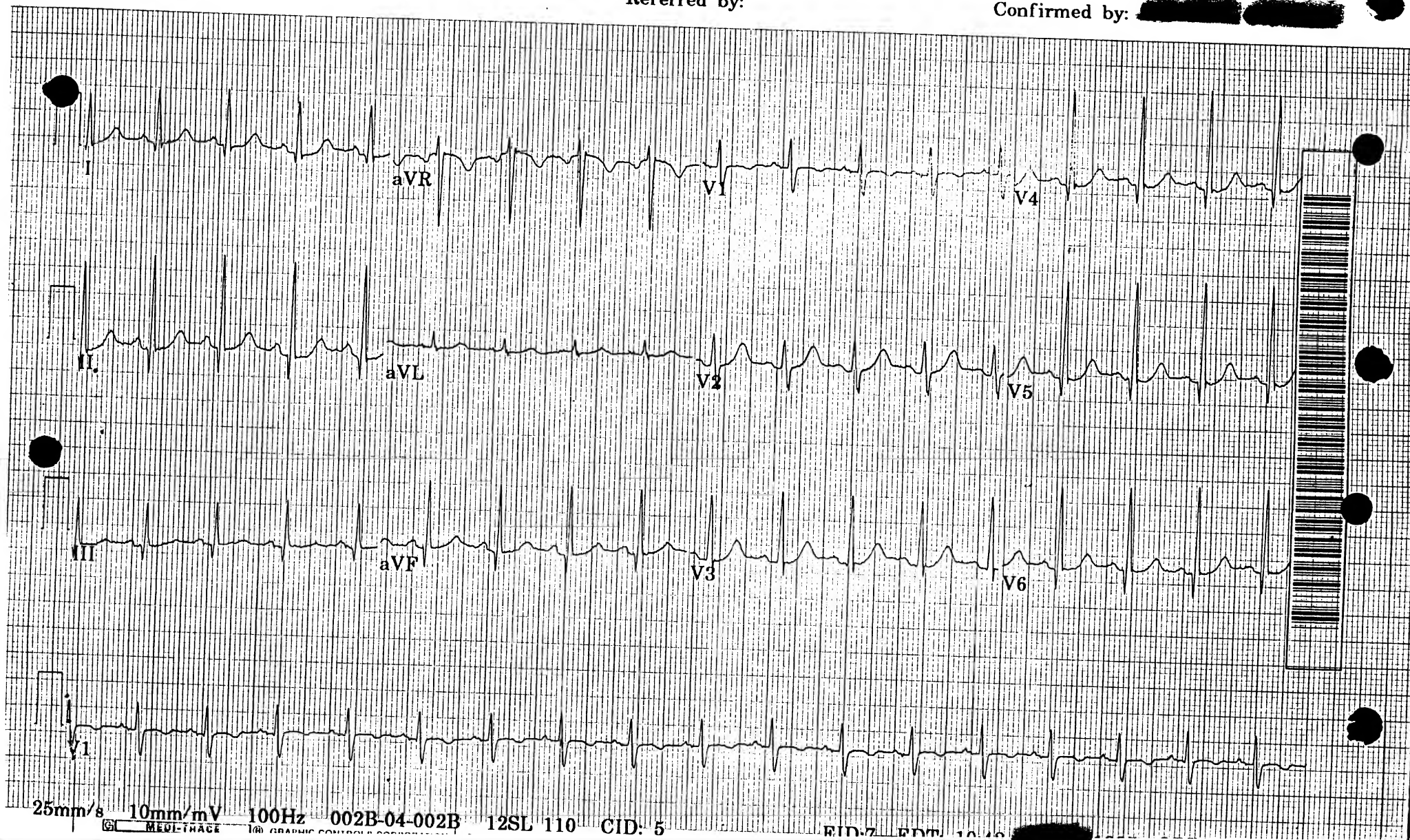
CANNOT RULE OUT INFEROLATERAL INFARCTION, AGE  
UNDETERMINED

NO PREVIOUS TRACINGS FOR COMPARISON  
CLINICAL CORRELATION IS REQUIRED

Referred by: [REDACTED]

Confirmed by: [REDACTED]

BEST AVAILABLE



41 yr  
Female Caucasian

Room [REDACTED]  
Loc:1 Option:30

Vent. rate 95 BPM  
PR interval 144 ms  
QRS duration 80 ms  
QT/QTc 336/422 ms  
P-R-T axes 59 50 47

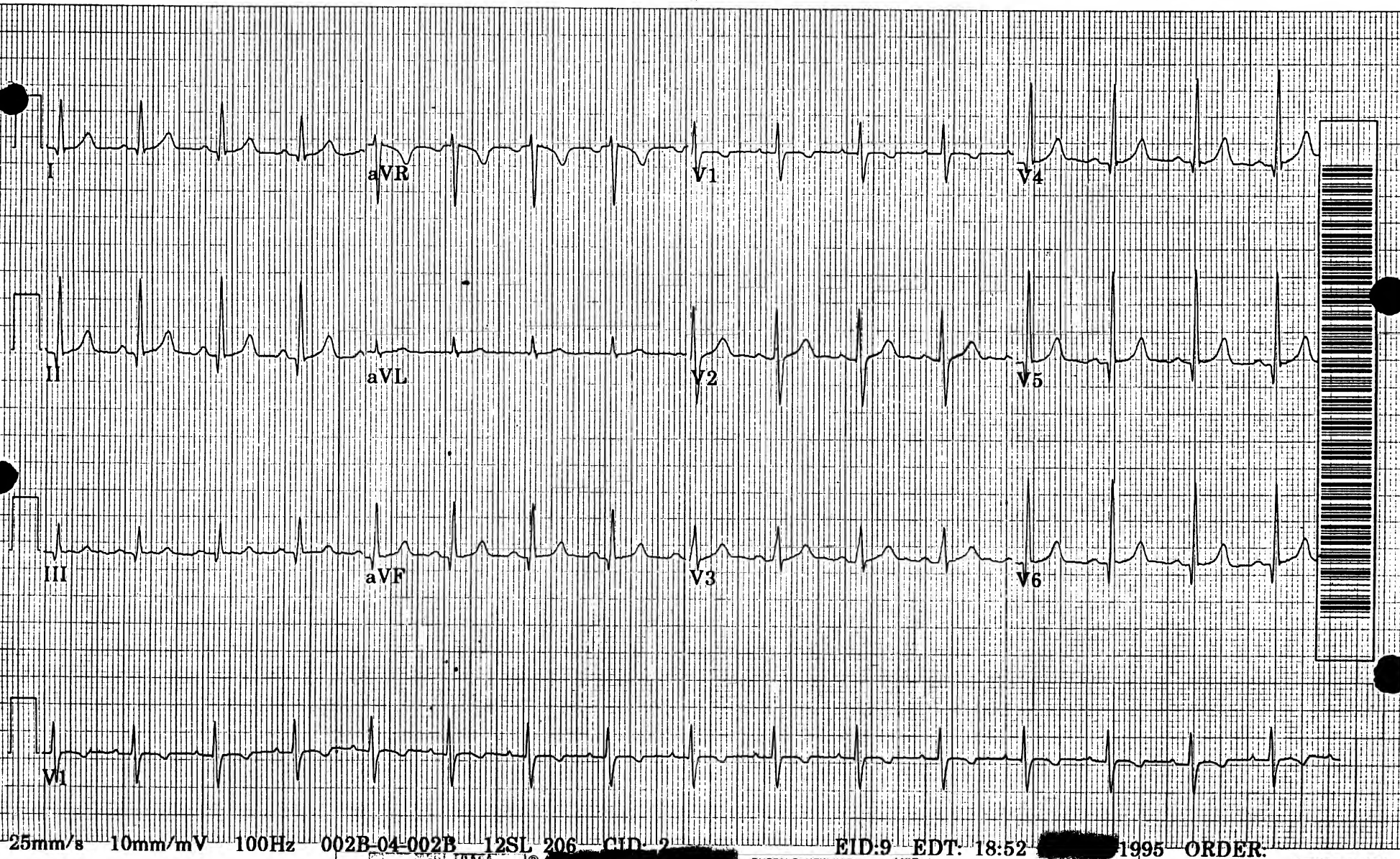
NORMAL SINUS RHYTHM  
NORMAL ECG  
SIMILAR TO PREVIOUS TRACING

Technician ID: [REDACTED]

Meds: Unknown

Referred by: [REDACTED]

Confirmed by: [REDACTED]



25mm/s 10mm/mV 100Hz 002B-04-002B-12SL 206 CID-2 EID:9 EDT: 18:52 [REDACTED] 1995 ORDER.

PRINTED IN U.S.A.

Adm [redacted] 95

Date Referred: [redacted] 95 6.00 pm

Evaluation Date: [redacted] 95

History: Pt is a 41yo female with multiple trauma. Pt involved in a MVA, was the restrained driver. Pt has 3cm laceration on the occipital scalp, contusion @ upper chest from belt, contusion @ sup. iliac crest region, open wound medial aspect @ heel, etc. s: 1 story home & entry, homemaker, 3 children, had worked as a substitute teacher before her family moved / pt unable to state goals at this time.

O: Appearance IV, (B) blue bolster elevating @ h.e.

Mental Status A & O X3

Perception pt appeared heavily medicated, but followed all commands

Sensation no/d

Palpation

Passive Mobility

\* HPI Posture callanous, small pneumothorax on (R) comminuted clavicular fx, fx metatarsals 2-5, chest tube (R) & multiple (R) rib fx. CT shows fluid of peritoneal cavity, [redacted] 95 - ORIF +

MMT/Limb & Trunk Function

(B) UE 5/5 - E pain limitations

(B) UE hip flexors 4/5 -

limited 2° to pain, remainder NT 2° to pain

Circumference Ex fixation @ calc fx - [redacted]

ROM

(B) UE appear actively WNL,

(B) LE - hips/knees appear

grossly WNL actively

PMH - C-section X3

Flexibility

Bed Mobility

Transfers

Gait

Will assess c/w B orders & Up orders

Order Other Eval & Rx restrictions per 1° service

[redacted] 95 - Up in chair

A: Problems: (1) d bed mobility (2) d transfers (3) d ambulation, (4) d balance/coordination 2° (B) surgery

Rehabilitation Potential: Good

Goals: See Progress Note.

P: Pt to be seen QD to BID for ambulation gait training, bed mobility, transfers and therapeutic exercise.

Thank you for this referral.

Signature [redacted]

Hx [redacted] DATE OF REFERRAL [redacted] REFERRING PHYSICIAN [redacted] not received [redacted]

DATE OF EVAL / DC [redacted] DOMINANT HAND [redacted] RT LT [redacted] 95 DATE OF INJURY/INSULT [redacted]

DIAGNOSIS Mult. Trauma RT Calcaneal FX LT Lisfranc FX disloc 2nd Metatarsal FX PRECAUTIONS ↑ Up in chair Keep leg elevated (P)

PHYSICIANS ORDERS Tx + eval for ADL's

PREVIOUS HISTORY/MEDICAL PROBLEMS 41yo w/ F MVA chronic calcis FX bone loss + dead space now Grade II open 2nd calcis FX transo-metatarsal FX - dislocation pneumo, RT chest wall capitulum scalp laceration FX Asthma RT Rib FX's

FAMILY AND HOME SITUATION

LIVES WITH Family

NUMBER OF FLOORS 1

NUMBER OF STEPS INTO HOME 1

OCCUPATION NA

LEISURE spend time w/ kids (3)

VISION glasses

HEARING WFL

S PATIENT/SIGNIFICANT OTHER'S STATED GOAL(S):

SYNERGY PATTERN (MOVEMENT PRESENT)

RIGHT WFL LEFT WFL

PAIN (P) Rest

EDEMA 0

SENSATION (GENERAL SENSATION) VE, WFL

FUNCTION OF UPPER EXTREMITY

	RIGHT	LEFT
NON-FUNCTIONAL		
GROSS FUNCTIONAL		
FUNCTIONAL ASSIST		
FUNCTIONAL	<u>2</u>	<u>1</u>

TRUNK BALANCE (S) bssit

O AFFECTED EXTREMITY

RANGE OF MOTION

	RIGHT	LEFT
SHOULDER	ABD <u>WFL</u> PROM <u>WFL</u>	ABD <u>WFL</u> PROM <u>WFL</u>
ELBOW	EXT <u>WFL</u> FLEX <u>WFL</u>	EXT <u>WFL</u> FLEX <u>WFL</u>
WRIST	EXT <u>WFL</u> FLEX <u>WFL</u>	EXT <u>WFL</u> FLEX <u>WFL</u>

STRENGTH

GENERAL GROSS UE STRENGTH

	RIGHT	LEFT
SHOULDER	ABD <u>good</u> FLEX <u>good</u>	ABD <u>good</u> FLEX <u>good</u>
ELBOW	EXT <u>good</u> FLEX <u>good</u>	EXT <u>good</u> FLEX <u>good</u>
WRIST	EXT <u>good</u> FLEX <u>good</u>	EXT <u>good</u> FLEX <u>good</u>

HAND STRENGTH

	RIGHT	LEFT
GROSS GRASP	<u>good</u>	<u>good</u>
LATERAL PINCH	<u>good</u>	<u>good</u>
3-JAW CHUCK	<u>good</u>	<u>good</u>

COORDINATION

9 HOLE PEG

PATIENT'S TENTATIVE DISCHARGE PLANS prob

HEAD CONTROL WFL

CNS/SENSORY INTEGRATION

ORIENTATION WFL

ATTENTION SPAN

LEVEL OF ALERTNESS

COMMUNICATION

PRAXIA

NEGLECT

AFFECT

MEMORY

ACTIVITIES OF DAILY LIVING

EATING indep

GROOMING (S)

DRESSING own (S)

TOILETING bedpan Max

BATHING Mia LR

BED ACTIVITIES (S) long sit → bssit

TRANSFERS TO Eval

VOCATIONAL/DRIVING POTENTIAL further address

A Pto problem areas in dressing transfers and home situation

P LTG Pto to benefit OT to maximize functioning in ADL act.

STG B/c Pto to be mod (I) w/ level of care husband and he will measure door frame and cm for BR or pass other cm bed need.

Therapist's Signature [redacted] DATE [redacted]

Occupational Therapy



Re-evaluation due:

\* Re-evaluation \*

DATE	1/95	1/95	1/95	1/95	1-95
Time in Treatment	60 min.	45 minutes	30	30	
Treatment Plan	Immobility, transfers, gait training, therapeutic exercise				
SUBJECTIVE	Initial Evaluation pt recalcitrant, crying in bthr ?	Resume pre-op order received. Pt has been on hold. 2/15/95 @ open os-calcis fr - repeat I&D,	Pt A&DX3, approx SCD's @ UE, IV, ① blue bolsters supporting	occasional difficulty focusing U 20 to ? medication	asked for O.T. & RADLS. Red <- w/o order on chart.
GOALS/TREATMENT	BS Advanced	BSICU →	BLE, Heart monitor, ②	BS	BS
Bed Mobility	Initial Eval done	dressing @ ② pt, disreintubated after surgery, 2/15 exhibited, 1/95- Grade II open os- calcis fr - repeat	Sat monitor, ROM - ② UE WNL ② UE - shoulder pt guarding, no pain. flexion to	pt up in stretcher chair when seen	Aspirine to long dist & min (A) + Encouragement
① Roll ② move ② Sidelying → sit mod (I)	See for details	I & D, subclav arthrodosis, rectus abdominus flap coverage. 1/95 up in chair for pulmonary toilet	50° and 90° AROM. ROM to 125° abt. flexion, elbow, wrist, hand WNL ② LE hip & knee WNL, ankle	Spoke 2 MD & asked if pt could have 1st step mattress to facilitate better transfers.	5 min x 2 (S) N/A
③ sit ↔ stand min (A) → CG		Sensation intact @ toe orders - upon Chair BID, elevate @ 1/95 in chair at times	etc NT MMT - ② UE 5/5 ② UE dext'd - 4/5, remainder 3/5 ② LE - hip flexors 5/5, & knee	Rx for UE exercises & strengthening. ② Hands encouraged pt to pull forward	N/A
Gait Training					
④ Pt to amb 30 x 1 w/ necessary assistive device min (A) → x6					
Steps	1: Pt to good head potential. Pt extremely drowsy w/ fatigue.	now WB sticks provided at this time chart review completed	flexors & extensors 5/5, remainder NT. A: Pt NWB ② - Problems are as previously	to move erect sitting posture A + AROM for shldr & elbow ✓ A: Pt has very low	(B) (I) SLR x3
⑤ Pt to amb 1:1 curb step 2 min (A).					
	P: Pt to be seen @ to BID as schedule permits for the above Rx.	Re-evaluation Reluctant to do things, more arms per 1/95, has been up in chair BID	started. Tol. Eval well. P: Pt to be seen @ BID for bed mobility, transfer training & therapeutic exercise. Thank you for referral.	endurance w/ way of anything need. P: Continue.	A: Col RX will P: cont
Therapist					

Cont above  
-95 Pt not seen. Will try to contact  
ask for post-op resume order & activity &  
WBing clarification - PTA

-95 pt to having x-ray done this A.M. P.M just back to bed p during  
up in chair one hr. Fatigued. Will continue A.M.

-95 pt up in chair eating lunch will cont attempts today  
Signature  
RIO: OT (PT) RT ST Progress Notes

Re-evaluation due:

DATE	████-95	████195	████-95	████-95	████-95
Time in Treatment	15/0/0	0/30	30	15	45
Treatment Plan					
SUBJECTIVE	pt up in chair this P.m. could be in chair	pt getting Bath	Husband Present for Rx.	φ family <del>pt</del> ERROR VT	
GOALS/TREATMENT	BS	BS C.O.T.	BS	BS	BS → dept
Rad mobility ① roll ② mod ③		mod ③ #1 Goal Met Supine ↔ sit			③ supine ↔ long sit
② rolling ↔ sit mod ③		mod ③ #2 Goal Met			③
transfers ③ Bed ↔ W/C ①		③ Bed ↔ W/C NW B + Backwards needed the Chair fixed.	Bed ↔ W/C mod ③ Backwards someone needs to hold Chair	BS commode to Bed mod ③	③
④ W/C Mobility Pt to be able to safely use w/c for transportation.				Will work on in A.M.	③ Demo one step + then did it w/c her in chair
⑤ Bed Mobility ① in all	worked on low Ex in Chair mod ③	Goal 1 & 2 met	③ Roll ③ sit ↔ supine & trap Seating	③	③ A: did well C Rx
	A: tol Rx well P: Cont P.M. for Chair	A: tol Rx well Lab 3-4 hold 20 to NW B Stakes P: Cont Lab Updated.	A: tol Rx well P: Will teach husband step (one) into house on 1st	A: Pt doing Very well Progressing P: Cont.	P: Will demo step to husband before D/c home today
Therapist	████	████	████	████	████



Re-evaluation due:

DATE	1/95	1/95	1/95	1/95	1/95
Time in Treatment	30'	45' / 30'	30'	30'	30'
Treatment Plan	ADL				Discharge
SUBJECTIVE	Refused bed Chair Reused Goals discussed	Dizzy + n/v sit	I'd like to stay up for a while	PT careful when talking about her daughter.	have mid- w/c
GOALS/TREATMENT	BS	BS / BS	BS	BS	BS PT remote slp ATTx
1 <u>ADL</u> w/c dress LE e ⑤ bath ⑤	UE Rm WFL	eval completed Talk to husband re	underware ⑤		⑤ ie food ⑤ ⑤ gown ⑤ bath Met
2 <u>Transfer</u> w/c transfer c min ⑤ w/c commode	See eval	measurements. for chair + doors out home.	bed act Mod ⑤ Transfer to w/c backing up netted PT move to have her telling how to transfer.	⑤ to bs Commode ⑤ bed act	⑤ Transfer w/c + commode Met
3 <u>home</u> recom needs		Bed act ⑤ UE dress ⑤ Balance good Donned Pants ⑤	Plan to stay in Chair for short time + friends Able to verbalize how to get back to bed.		bs commod bed - w/c ordered for home Comm + UE WFL
		Transfer to w/c (Bed Act ⑤) backing into w/c e ⑤ holding Chair and returning to bed forward ⑤	would like to try bs Commode next and bring to dpt for Kitchen.	PT ft out of splint + angle e ↑ + planker. PT to tell RIO when change	Recomm home plan + instruction of transfer etc. no further OT until w/c allowed thru for home care
	Order written 4/23 Recd diff order 3/8. Will start ASAP	Doing well Tolerated trans. will try sliding bd transfer + commode + Able	Talked to Dr Gable re did get PT COB	drinking to better position Pm pt getting splint changes Dr Gable re as able	Met 3/3 STG. Family involved Progress made in all 4 areas seen 6 w/c days Prab to give input Aware of safety Satisfied gains and to make stx
Therapist					

1/95 -> PT not seen 2° to visiting daughter

PT should down  
Per her report she  
has ⑤ meals  
from friends

Signature

DATE	12-15-95				
Time in Treatment	15/15				
Treatment Plan	D/C Summary				
SUBJECTIVE	Pt prepared for D/C home and husband reported this feeling also yet still				
GOALS/TREATMENT	Rx Sessions				
Bed mobility	#1 Goal Met				
① Roll ② mid ③	①				
② sidelying ↔ sit	#2 Goal Met				
mod ④	①				
Transfers	#6 Goal Met				
⑥ Bed ↔ w/c	①				
W/C mobility	① Goal Met				
⑦ p/t to be able to safely use WC for transportation	Revised step & Van transfer & Husband ④				
Bed mobility	② step.				
8 ⑦ in ALL	① Goal Met				
	A: Goals 3, 4, 5 NA 7/8 goals met - all goals met! P. Pt D/C home & from family & friends all equipment received in Bed & B5 commode no further P.T. needed until WB status ↑				
Therapist					

Signature

**MEDICAL RELEASE**

I, \_\_\_\_\_ hereby authorize  
(Patient or Legal Guardian)

\_\_\_\_\_, to release to the Accident Research Group of  
(Physician or Hospital)

Calspan Corporation, Buffalo, New York, any and all information (including x-rays and  
radiologists reports) pertaining to the nature and extent of injuries sustained by

\_\_\_\_\_ in a motor vehicle accident which occurred on  
(Patient)

\_\_\_\_\_-95  
(Date)

I understand that this information is to be used solely for the purpose of safety research that  
is sponsored by the U.S. Department of Transportation (National Highway Traffic Safety  
Administration) in Washington, D.C. The study focuses on the relationship between automotive  
interior design, occupant restraint systems, and occupant injuries. The name of the patient and  
family will not be used to identify the materials contained in this case file.

\_\_\_\_\_-95  
(Date)

\_\_\_\_\_  
(Patient or Guardian Signature)

- ☒ FS
- ☒ ER
- ☒ HP
- ☒ DS
- ☒ CONS

- ☒ PT
- ☒ ST
- ☒ OT
- ☒ MM
- ☒ EKG
- ☒ EEG

- ☐ PN
- ☐ AUDI
- ☐ PEDS
- ☐ OP
- ☐ Surg

- ☐ F/LM
- ☐ LAB
- ☐ X RAY
- ☐ MN
- ☐ ORTHO
- ☐ OTHER

COPIED BY

1995

PATIENT'S LAST NAME		FIRST NAME		MIDDLE NAME		ROOM & BED NO.		MED. RECORD NO.	
ADDRESS		COUNTY OF RESIDENCE							
DATE ADMITTED		HOUR		DATE OF BIRTH		AGE		BIRTHPLACE	
7/95		22:00		/87		7 yr.			
ATTENDING PHYSICIAN		DR. CODE		MED. CODE		REV. CODE		REFERRING PHYSICIAN AND LOCATION	
								Unknown	
ADMITTING DIAGNOSIS OR CHIEF COMPLAINT									
Multiple Trauma									
PARENT OR GUARDIAN LAST NAME		FIRST NAME & MIDDLE INITIAL				MED. <input type="checkbox"/>		SURG. <input checked="" type="checkbox"/>	
		Thomas/				PHONE NO.		FORMER PATIENT <input type="checkbox"/> YES <input type="checkbox"/> NO	
ADDRESS		Dad: BD 54 Mom: BD 53				OCCUPATION		Unknown	
same as above									
EMPLOYER OF PARENT OR GUARDIAN									
HOW LONG									
PERSON TO NOTIFY OTHER THAN PARENT OR GUARDIAN									
Grandparents/									
BLUE CROSS		CONTRACT NO.		EFFECTIVE DATE		TYPE		PAYROLL DEDUCTION	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO								<input type="checkbox"/> <input type="checkbox"/>	
UNDER NAME OF									
IN BLUE CROSS PLAN AT CITY & STATE									
COMMERCIAL INSURANCE									
STATE CRIPPLED CHILDREN'S		COUNTY WELFARE				S.S. #:			
N/A		N/A				OTHER			
CHILD ENROLLED IN SCHOOL		<input type="checkbox"/> YES <input type="checkbox"/> NO		CARRIER #1		#2		#3	
NAME OF SCHOOL		ADDRESS							
WHAT GRADE?		TEACHER							
FINAL DIAGNOSES									
A. PRIMARY RESPONSIBILITY FOR THIS HOSPITALIZATION									
open Head Injury									
DISCHARGED <input checked="" type="checkbox"/> ALIVE <input type="checkbox"/> DEAD <input type="checkbox"/> AUTOPSY <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/>									
B. SECONDARY DIAGNOSIS									
C. SURGICAL PROCEDURES									
1/95 Rigid Bronchoscopy									
1/95 Bilateral Craniectomy and Debridement of necrotic herniated									
1/95 Tracheostomy, Gastrostomy tube cerebral tissue and Camino									
Intracranial Pressure Monitor Placement									
DATE 1/95 ATTENDING PHYSICIAN									
02.02(2) 01.18 33.23 31.29 96.01 99.15									

**PATIENT NAME:**

**MR#:**

**DATE ADMITTED:**

**ATTENDING PHYSICIAN:**

**ATTENDING RESIDENT:**

**HISTORY OF PRESENT ILLNESS:**

This is a 7 year old white female who was an unrestrained passenger in the back seat of a car. She was allegedly thrown from the car. I am unsure if the window was open or closed. The patient was found down at the scene.

**PAST MEDICAL HISTORY:**

Not obtainable as there are currently no family members available. The parents were apparently taken to Miami Valley as they were involved in the trauma as well.

**PHYSICAL EXAMINATION:**

**VITAL SIGNS--**

130, temperature 37.0°, respiratory rate - patient paralyzed. Blood pressure 100/70, pulse

**HEENT--**

There is a large laceration on the scalp. There appears to be a skull fracture palpable and questionable brain matter in the laceration that may be fat. The patient has deviation of her eyes to the left. Pupils are 3 mm and initially reactive before paralyzation. Nose patent. There is a missing tooth in the lower bridge of teeth. On throat exam, trachea is midline. There are palpable pulses.

**HEART--**

Regular rate and rhythm.

**LUNGS--**

She has slightly decreased

breath sounds on the right side compared to the left.

**ABDOMEN--**

Soft, non-distended.

**PELVIS--**

Rock is negative.

**EXTREMITIES--**

No noticeable injuries.

**RECTAL--**

Pending.

**NEUROLOGIC--**

Cranial nerves are not

assessable as the patient is having decorticate posturing and deviation of the eyes to the left. She has minimally reactive pupils which are 3 mm. The patient is unresponsive. Glasgow coma scale is 4.

**LABORATORY DATA:**

Hemoglobin is 12.7. The remainder of lab is pending. Chest x-ray revealed a tooth in the carina. Cervical spine is negative. AP and lateral thoracolumbar spine films are negative. Pelvis is negative. CT of the head revealed multiple skull fractures, diffuse punctate contusions, multiple small right intracranial hemorrhages, small right parietal subdural hematoma, positive midline shift, cisterns open, and ventricles are noted to be small. CT of the abdomen is pending. The remainder of labs are pending.

**HISTORY AND PHYSICAL EXAM**

**PATIENT NAME:**

**MR#:**

**ASSESSMENT AND PLAN:**

The patient had received 25 mg of Mannitol. An NG was placed and patient was intubated. She was reintubated with a cuffed tube when able. A Foley was placed. The patient is being hyperventilated. Fluids are currently being given as patient needs as well as patient receiving a couple of units of blood. The patient was discussed with [REDACTED]. It is likely that the patient will need ICP monitoring, Swan-Ganz catheter, and may need bronchoscopy. The patient is seen with [REDACTED].

**HISTORY AND PHYSICAL EXAM**



PATIENT NAME:  
MR#:

DATE ADMITTED:  
DATE DISCHARGED:  
ATTENDING PHYSICIAN:  
ATTENDING RESIDENT:  
PRIVATE PHYSICIAN:

ADMITTING DIAGNOSIS:

Open head injury.

DISCHARGE DIAGNOSIS:

-Open head injury.  
-Chronic vegetative state.

PROCEDURES:

- 95 - Rigid bronchoscopy.
- 95 - Bilateral Craniectomy, debridement of necrotic herniated cerebral tissue and placement of Camino intracranial pressure monitor.
- 95 - Tracheostomy and gastrostomy placement.

HISTORY OF PRESENT ILLNESS:

██████████ is a 7-year-old female who was the unrestrained passenger in a motor vehicle involved in a high speed head on collision. At the scene, she was evaluated by a physician who was riding with the squad and was unresponsive and exhibiting decerebrate posturing. She was extracted from the automobile and intubation was attempted which was unsuccessful. Upon her arrival at ██████████ in the late night hours of ██████-95 she was at that time successfully intubated. She had sluggish pupillary reflexes. The eyes were deviated to the left. There was a large scalp laceration which extended across the midline with exposed skull and obvious fracture. No cerebral tissue was visualized at that time. There were several broken teeth and no obvious injuries to the chest, abdomen, pelvis or extremities.

HOSPITAL COURSE:

When the patient was seen by neurosurgery, she had been pharmacologically paralyzed for her intubation and had been taken to the CT scanner. At that time she was hypotensive with systolic blood pressures in the 50s. A brief examination was performed while she was still on the scanner. She had a large scalp laceration which was partially covered by bandages, the full extent could not be appreciated at that time. There did not appear to be any acute bleeding from that area. However, the dressings were saturated. The paralytic agents were wearing off, she was not moving spontaneously. There was no response to corneal stimulation. There was no gag. There was no response to deep noxious stimuli in the midline. There was no response to nail bed crush and neither hand and no response in the right foot. In the left foot to nail bed pressure there was nonspecific movement in the toes. She was areflexic and the toes were none responding at this time. The cervical spine studies were reviewed and did not show any obvious injury. The head CT scan demonstrated a

DISCHARGE SUMMARY

PATIENT NAME:  
MR#:

skull fracture extending bilaterally that was widely diastatic but only minimally depressed, however. There was a hematoma in the right parietal lobe consistent with laceration of the dura and the cerebral tissue directly below the fracture suggesting that the fracture edge had initially been pushed into the brain tissue. The hemorrhage continued to a depth of approximately 2.5 cm on the CT scan. There was a very small subdural hematoma on the right side which was at its greatest extent at the most 7 mm thick and it was not causing any significant mass effect. There were a number of small punctate contusions throughout both hemispheres basal ganglia and brain stem. The ventricles were very small the ambient cisterns were still present although there were some asymmetry of the lateral recess of the ambient cistern on the right side. The fourth ventricle was open and the basilar cisterns were open.

The patient's Glasgow coma scale on arrival was four and she was initially taken to the ICU where our plans were to irrigate and close the scalp laceration and placed a communal ICP monitor for conservative management of her posttraumatic brain swelling. However on taking down the dressings, we encountered a considerable quantity of necrotic herniated cerebral tissue which had not been present when she arrived in the emergency room which suggested an evolving process with the swelling. Therefore, she was taken emergently to the operating room and the laceration was extended on both sides and the fracture pieces were debrided as was the necrotic brain tissue. Again, a significant quantity of tissue was encountered in the subgaleal space.

Once the tissue had been removed the dural edges were inspected in the area of the fracture on the right side. The dura was lacerated and shredded into several pieces it could not be primarily repaired and because of this being an open injury we felt performing a duraplasty at this time would be unadvisable because of the infection risk. After the craniectomy, the tissue appeared to be relatively flat and there was no ongoing herniation of tissue. At that point, the wound was closed primarily with the bone fragments left out leaving a large bilateral decompressive craniectomy.

An ICP Monitor was placed and the intracranial pressure was noted to be 13 mmHg of Mercury, this with hyperventilation being maintained. From there, she was taken directly to CT scan and this study demonstrated that ventricles and cisterns were considerably more patent. There was hemorrhagic contusion in the area of the herniated brain but no mass effect. The small subdural that had been present previously was not appreciable.

The patient was admitted to the [REDACTED] and maintained with hyperventilation and osmotic agents as well as pressors to maintain adequate cerebral

DISCHARGE SUMMARY

**PATIENT NAME:**

**MR#:**

profusion pressures. The first two days the ICP's ranged from the 20 to 30 range and cerebral profusion pressures were tenuous but could generally be maintained in the 50s. As time progressed, the intracranial pressure became more easily managed and the cerebral profusion pressures came up and we were able to wean the Nembutal and Dopamine and then eventually wean hyperventilation and the Mannitol while maintain excellent intracranial pressures. The patient's ICP monitor was removed on the third of March during the proceeding 24 hours her ICP had ranged from 7 to 13 and her cerebral profusion pressure 56 to 103. A CT-scan that same day demonstrated that she had resolved the small punctate contusions. There was still an area of rather significant cephalomalacia on the right posterior frontal and parietal area and a small area of edema in the left frontal region. However, there was no mass effect. The intrahemispheric fissure was open. The Sylvian fissures were open. The ventricles were of normal size and configuration. The basilar cisterns and ambient cisterns were all normal in appearance.

The patient remained in coma vigil. She became markedly hypotonic especially of the lower extremities and could not be maintained with splints and was begun with serial casting. The patient was maintained on Claforan' and Clindamycin for aspiration. She had had significant aspiration with collapse of the right lung at the time of her presentation and during the same anesthetic as her intracranial procedure was performed she underwent rigid bronchoscopy for removal of large food particles from the right bronchial tree. Despite this, all of her cultures remained negative with exception of normal Flora and colonization with Staph. She continued to have fevers associated with tachycardia, tachypnea, diaphoresis, increasing tone and it was felt to be consistent with anergic storming. This responded well to doses of Thorazine and she was placed on Clonidine patch which significantly decreased the frequency and severity of these spells as well. Because she was not becoming responsive and remaining in a coma vigil, she underwent placement of a G-tube and tracheostomy which she tolerated well. The tracheostomy was changed on postoperative day five from that procedure.

Other problems encountered during her hospitalization was hyponatremia not associated with diabetes insipidus and this was treated with increase of free water in her tube feeds and she responded well with that.

**DISCHARGE PLAN:**

She is discharged on hospital day #20. She remains in coma vigil, but has long alert periods and we are very hopeful that she will regain responsiveness and interaction with outside stimuli. She has a G-tube and tracheostomy in place and has casts on both lower extremities which should be changed weekly. Her current medications are Zantac 50 mg b.i.d., Catapres TTS-1 patch replace every 7 days, Thorazine 10 mg every 6 hours p.r.n. basis. Her

**DISCHARGE SUMMARY**

**PATIENT NAME:**

**MR#:**

tube feeds are Traumacal 0.5 strength at 125 cc per hour. At the time of her discharge her electrolytes: Sodium 147, potassium 3.7, chloride 107, Bicarb 25.6, BUN 22, Creatinine 0.5 and glucose 135. Her hemoglobin and hematocrit are 12.8 and 38.0 respectively, platelet count is 467,000, white count is 14.2 with 67% segs, 6% bands, 16% lymphs, 8% monocytes and 3 eosinophils. Blood cultures, sputum cultures and urine cultures are no growth at this time. She has a large craniectomy defect and we anticipate repairing this with Titanium Methylmethacrylate cranioplasty in 6 to 12 months. There is a resolving subgaleal hematoma.

MC:tac

D [REDACTED]-95

T [REDACTED]-95

PATIENT NAME:

MR#:

DATE OF CONSULTATION:

REQUESTING PHYSICIAN:

CONSULTING PHYSICIAN:

[REDACTED]-95  
[REDACTED]

**HISTORY OF PRESENT ILLNESS:**

This is a 6 year old female who was an unrestrained occupant in the back seat in a vehicle involved in a high speed head on collision. She was catapulted through the front window and found outside the car by the emergency medical personnel with bilateral spontaneous decerebrate posturing. She was brought to [REDACTED] where she was noted to still be posturing and she was paralyzed and intubated. She was sent for CT scan after her initial evaluation by the trauma team. A neurosurgical consultation was requested as the patient was being sent for CT scan. On my arrival here, the patient was in the CT scanner. She was hypotensive with systolic blood pressures in the 50's.

**NEUROSURGICAL EVALUATION:**

The patient was briefly examined between radiographic studies. The examination revealed a large scalp laceration which is partially covered by bandages, so full extent cannot be appreciated. There does not appear to be any actual bleeding from this at the moment. However, the dressings are significantly saturated with blood. The child is no longer paralyzed, but is not moving. She is being hyperventilated, but despite vigorous efforts, the PCO2 at this time is 37. On 100% FIO2, the PAO2 is 139. The pupils are 2.5 mm bilaterally and non-reactive. There is a piece of glass embedded in the center of the left cornea and a horizontal abrasion across the middle of the right cornea. There is no response to corneal stimulation. We cannot check oculocephalics at this time. There is no gag reflex. There is no response to deep noxious stimuli in the midline. There is no response to nail bed crush on either hand or in the right foot. There is some non-specific movement of the toes in the left foot with nail bed pressure. There was no response to arterial punctures. There are no elicited reflexes or Babinskis at this time.

The cervical spine studies are reviewed and the odontoid is of limited quality secondary to overlay of the teeth. However, the AP and lateral cervical, thoracic, and lumbosacral spine show no evidence of fracture, dislocation, or soft tissue injury.

The head CT scan demonstrates a minimally depressed skull fracture extending biparietally, but more extensively down the right side than the left. As it crosses the sagittal suture, that suture is diastatic. It is not associated with an epidural hematoma. There is a small subdural hematoma on the right side

**PATIENT NAME:**

**MR#:**

measuring approximately 7 mm in its thickness, but not causing significant mass effect at this point. There is a contusion underlying the fracture line which has a linear appearance suggesting a cortical laceration and possibly a dural laceration as well. There are multiple small punctate contusions throughout both hemispheres, basal ganglia, and brainstem. They are more concentrated on the centrum semiovale. The ventricles are very small, but the ambient cisterns are open at this time although there is some asymmetry of the lateral recesses of the ambient cistern with the right side being somewhat deformed. The fourth ventricle is open. The basilar cisterns are open.

**IMPRESSION:**

Severe head injury with skull fracture, multiple contusions, and subdural hematoma. There is midline shift, but it seems to be more associated with the multiple contusions rather than the subdural hematoma. The Glasgow coma scale is 4 and she gets a sole point for the decerebrate posturing at presentation. The prognosis for his head injury is very poor. I think that attempts to evacuate the small subdural hematoma at this time would result in more harm than benefit. We would recommend not taking her to the operating room and subjecting her to a general anesthetic. I suspect that her hypotension currently is secondary to blood loss, and we would recommend giving her colloid until blood is available and then transfusing her empirically. We would like to place a Camino ICP monitor and will plan on aggressive management with hyperventilation and osmotic diuretics and possibly inotrope and pressor therapy if required. We will debride the laceration at the bedside and perform a primary closure. If at some time the child returns to the operating room and it is felt that further debridement is required, it can be done at that time. A follow-up head CT should be obtained in six hours or sooner should there be any abrupt changes in the intracranial pressure. There is a good likelihood that the subdural may enlarge, the contusions may enlarge, or she may develop a bone edge epidural hematoma which will require surgical evacuation. We will be prepared to do that should those problems occur. Otherwise, our recommendation would be to manage her with aggressive medical interventions.

**ADDENDUM:**

The patient is out of the CT scanner and a more thorough examination can be performed. The bandages over the head are taken down and there is a large open scalp laceration extending biparietally. There is herniation of brain tissue through the associated fracture.

This child will need surgical debridement and repair of the dural laceration. Our plan will be to leave the bone out and hopefully we will be able to achieve adequate



PATIENT NAME:

MR#:

dural closure. We will need to see at the time of surgery whether or not the subdural can be removed to any benefit to the patient without resulting in more significant loss of cerebral tissue.

MC/gi

D [REDACTED]-95

T [REDACTED]-95

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST: 1/95 TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☒

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

740 S/P MVA head injury - hit windshield  
& flying from car. C/S for vent mgt

UNIT CLERK TELEPHONED THE CONSULTANT. HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

740 W/F transported to 2° [redacted], c depressed  
skull fx, small subdural hematoma, multiple cerebral contusion  
& now c decerebrate posturing. Pt apparently seizing on scene of accident, given Ativan  
in ER. Now intubated. Pt also c tooth @ [redacted] & lung  
meds none. P med problems

Blt C/S & problem

PE 35.8 - 114 - 95/40 30/30

intubated, unconscious. Decerebrate posturing  
HEENT lg skull lac. pupils ~3mm, minimally reacting  
dark fragment @ eye.

heart RRR 30. lungs BS ↓ @ side @ rhonch @  
abd soft NO mass & HSM.

neuro as above. reflexes 2+, ? w/d to pain

ABG 6.81/59.8/191/9.5/-27.3

7.25/37.5/139/16/-10.1

7.3/44

CXR tooth @ carina

repeat CXR - collapse of @  
lung. loc. tooth

CT abd @.

other labs pending

Ap 1. Head injury 2° MVA - Pt to go to surgery per  
[redacted]. Surgery to remove tooth @ c up  
[redacted], ophth. c/s in AM for @ corneal abrasion @ [redacted]  
2. Resp - Vent settings IMV 30, VT 300cc, PEEP 2, IT 1.0.  
Will adjust to keep Pco2 ≤ 30. Cmt pulse ox,  
transderm.

SIGNATURE OF  
CONSULTANT:

SERVICE:

TIME:

DATE: 1/95

CONSULTATION REPORT

PATIENT NAME

MEDICAL IMAGING #

BD:

**MEDICAL IMAGING REPORT**

STATION OR BED

ATTENDING PHYSICIAN

REQUESTING PHYSICIAN

MEDICAL RECORD #

PORTABLE CHEST: 6:00 a.m.

The examination is compared to one performed yesterday.

The right chest tube remains in place. The obscuring at the left base remains about the same as was seen yesterday. The right-sided fractured ribs are still seen. There is no real pneumothorax.

IMPRESSION: OBSCURING AT THE LEFT SIDE BY FLUID-ATELECTASIS REMAINS ABOUT THE SAME. THE CHEST IS UNCHANGED FROM THE EARLIER EXAMINATION PERFORMED YESTERDAY.

**MEDICAL IMAGING REPORT**

PATIENT NAME [REDACTED]	MEDICAL IMAGING NO. [REDACTED] F	MED. REC. NO. [REDACTED]	STATION OR BED [REDACTED]
ATTENDING PHYSICIAN [REDACTED]	REQUESTING PHYSICIAN [REDACTED]	ADDITIONAL REPORT TO: [REDACTED]	

PORTABLE CHEST:

Comparison [REDACTED] earlier.

Endotracheal tube in good position. Right subclavian catheter in SVC. Right chest tube in place. Interstitial and alveolar filling process is seen bilaterally, probably representing a combination of atelectasis and contusion, appearing unchanged from the previous examination allowing for technique. Multiple right rib fractures are again seen.

PORTABLE CHEST (7:00 A.M.):

Comparison [REDACTED].

Tube and catheter position is similar. Infiltrative density is again seen bilaterally representing a combination of atelectasis and contusion, appears slightly worse only on a technical basis.

**MEDICAL IMAGING REPORT**

PATIENT NAME [REDACTED]	MEDICAL IMAGING NO. [REDACTED] F	MED. REC. NO. [REDACTED]	STATION OR BED [REDACTED]
ATTENDING PHYSICIAN [REDACTED]	REQUESTING PHYSICIAN [REDACTED]	ADDITIONAL REPORT TO: [REDACTED]	

INTRAOPERATIVE RIGHT ANKLE:

Intraoperative AP and lateral views were obtained at 9:30 a.m., 9:45 a.m. and 10:30 a.m., and demonstrate a fracture of the calcaneus with placement of K-wires through the heel and traversing the subtalar joint with subsequent placement over the wires of screws for arthrodesis and fixation of the calcaneal fracture.

PORTABLE CHEST (6:00 A.M.):

Comparison is made with [REDACTED]

Indication: Multiple trauma.

A single right-sided chest tube is seen in place with mild atelectatic densities and lateral pleural thickening associated with the tube placement and multiple rib fractures. Predominantly lower lung field parenchymal densities and perhaps a small pleural effusion is seen on the left. The right subclavian line is unchanged in position. Overall the appearance is stable compared to the prior study. No definite new abnormalities are seen.

MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT

[REDACTED]

PATIENT NAME	MEDICAL IMAGING #	STATION OR BED #		
[REDACTED]	[REDACTED]	[REDACTED]		
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	MEDICAL RECORD #		
[REDACTED]	[REDACTED]	[REDACTED]		
VISIT TYPE	UNIT	ACCT #	DATE OF BIRTH	SEX
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	F
DATE OF PROCEDURE				

[REDACTED]

AP PORTABLE CHEST (11:40 AM):

Comparison is made to [REDACTED]. The right sided chest tube has been removed since the previous film. No pneumothorax is identified. A right sided subclavian central venous catheter is now located slightly higher within the superior vena cava, but remains in satisfactory position. Multiple right sided rib fractures are again noted. There is localized pleural thickening or loculated pleural fluid along the right lower lateral chest wall. There are hazy bilateral pulmonary infiltrates in both perihilar areas. There is also hazy left basal increased density, probably related to some pleural fluid in this area as well. No other significant abnormalities are noted and there has been no significant change since the previous day.

[REDACTED]

AP PORTABLE CHEST:

Comparison is made to [REDACTED]. The right subclavian central venous catheter appears unchanged in position. Multiple right sided rib fractures are again noted with adjacent pleural thickening or loculated pleural fluid. Bilateral pulmonary infiltrates and hazy left basal pleural fluid are also again noted. The overall appearance of the chest has not changed significantly since the previous day.



**MEDICAL IMAGING REPORT**

PATIENT NAME	MEDICAL IMAGING NO.	MED. REC. NO.	STATION OR BED
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	ADDITIONAL REPORT TO:	

CHEST (PORTABLE) 7:00 A.M.:

Comparison:

The left lower lobe infiltrate or contusion and left pleural effusion are unchanged. There are multiple right-sided rib fractures with the right pleural effusion being unchanged as well. There is minor atelectasis in the right base. The central venous line is unchanged in position.

MEDICAL IMAGING DEPARTMENT  
RADIOLOGY REPORT

[REDACTED] HOSPITAL [REDACTED], [REDACTED]

PATIENT NAME	MEDICAL IMAGING #	STATION OR BED #		
[REDACTED]	[REDACTED]	[REDACTED]		
ATTENDING PHYSICIAN	REQUESTING PHYSICIAN	MEDICAL RECORD #		
[REDACTED]	[REDACTED]	[REDACTED]		
VISIT TYPE	UNIT	ACCT #	DATE OF BIRTH	SEX
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
DATE OF PROCEDURE				
[REDACTED]				

PORTABLE CHEST 7:00 AM:

Provided history: Multiple trauma.

A single portable view of the chest is compared to the previous portable study dated [REDACTED]. A right subclavian catheter remains in place with the tip in the region of the superior vena cava. There is persistent hazy opacification of the left lower lung which in part may represent a layering left effusion. There are multiple right rib fractures with hazy opacification at the right lung base which may represent pleural reaction and/or pleural effusion.

IMPRESSION:

1. OVERALL, NO SIGNIFICANT INTERVAL CHANGE.

PATIENT NAME

MEDICAL IMAGING NO.

MED. REC. NO.

STATION OR REF.

ATTENDING PHYSICIAN

REQUESTING PHYSICIAN

ADDITIONAL REPORT TO:

RIGHT FOOT (THREE VIEWS):

Comparison -

Plaster cast is identified in place. Two orthopedic screws are fixing a comminuted mid and proximal os calcis fracture while some bony detail is limited, as is visualization of the subtalar joint. Overall alignment appears preserved and relatively anatomic.

IMPRESSION: STABLE APPEARANCE OF COMMINUTED OS CALCIS FRACTURE. NO EVIDENCE FOR PROSTHESIS LOOSENING OR MALPOSITION.

LEFT FOOT (TWO VIEWS):

Comparison -

Screw fixation at the site of tarsal/metatarsal fracture dislocation is identified. There is also wire fixation through the second metatarsal. Overall alignment appears anatomic. Also, presence of the cast limits evaluation. The third through fifth tarsal/metatarsal joints are not well demonstrated, but again overall alignment appears essentially anatomic.

41 yr  
Female Caucasian

Room: [REDACTED]  
Loc: 0 Option: 22

ID: [REDACTED]  
Vent. rate 106 BPM  
PR interval 136 ms  
QRS duration 80 ms  
QT/QTc 336/446 ms  
P-R-T axes 51 54 48

SINUS TACHYCARDIA

INCREASED R/S RATIO IN V1 CONSIDER TRUE POSTERIOR  
INFARCTION

CANNOT RULE OUT INFEROLATERAL INFARCTION, AGE  
UNDETERMINED

NO PREVIOUS TRACINGS FOR COMPARISON  
CLINICAL CORRELATION IS REQUIRED

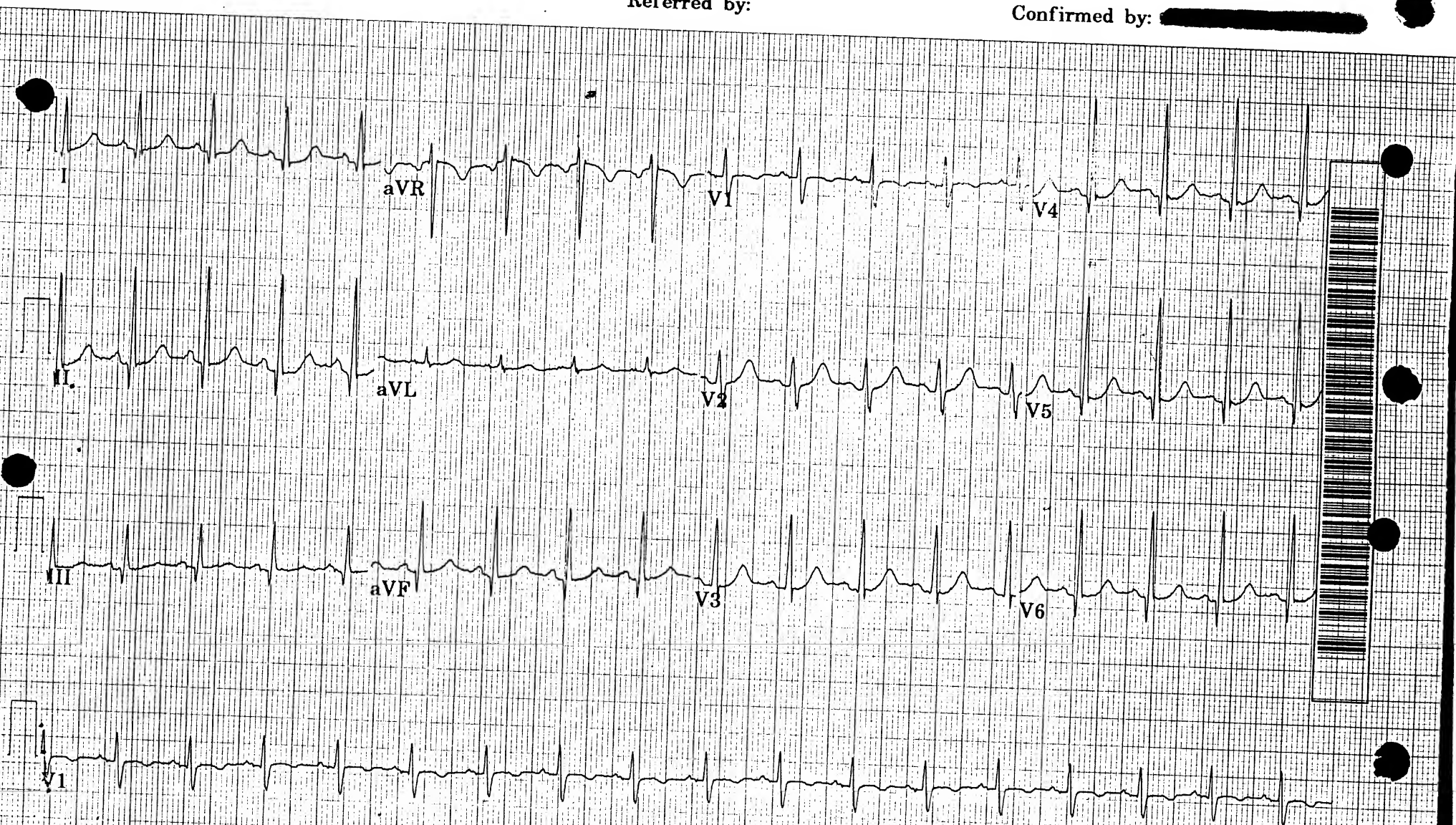
Referred by:

Confirmed by: [REDACTED]

ROUTINE RECORD

Technician ID: [REDACTED]

Meds: Unknown



41 yr  
Female Caucasian

Vent. rate 95 BPM  
PR interval 144 ms  
QRS duration 80 ms  
QT/QTc 336/422 ms  
P-R-T axes 59 50 47

NORMAL SINUS RHYTHM  
NORMAL ECG  
SIMILAR TO PREVIOUS TRACING

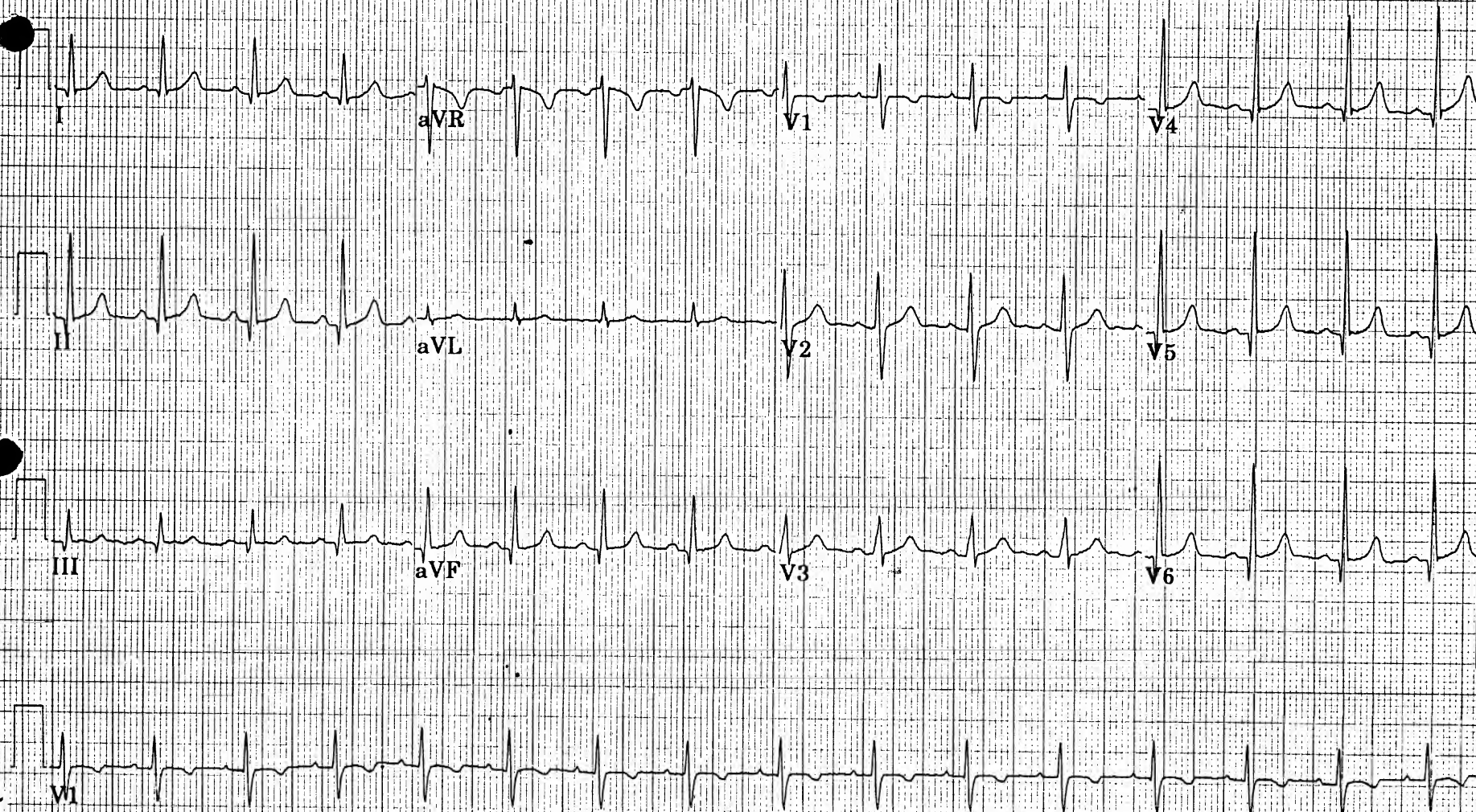
Room: [REDACTED]  
Loc: 1 Option: 30

Technician ID: [REDACTED]

Meds: Unknown

Referred by: 11180320

Confirmed by: JOHN RICH





Adm [redacted] 95

Date Referred: [redacted] 95 6.00 pm

Evaluation Date: [redacted] 95

History: Pt is a 41yo female of multiple trauma. Involved in a [redacted] was the restrained driver. Pt is 3cm transverse laceration on the occipital scalp, contusion @ upper chest from belt, contusion @ sup. iliac crest region, open wound medial aspect @ heel, [redacted] 1 story home & entry, homemaker, 3 children, had worked as a substitute teacher before her family moved / pt unable to state goals at this time

O: Appearance IV, [redacted] blue bolster elevating @ h.e.

Mental Status A & O X3

Perception pt appeared heavily medicated, but followed all commands

Sensation no/d

Palpation

Passive Mobility

\* HPI Posture callus, small pneumothorax on [redacted] comminuted calcaneal fx, fx metatarsals 2-5, chest tube @ [redacted] Multiple @ rib fx. CT shows fluid of peritoneal lavage, [redacted] 95 - ORIF +

MMT/Limb & Trunk Function

[redacted] UE [redacted] - E pain limitations

[redacted] UE hip flexors [redacted] limited 20 to pain, remainder NT 20 to pain

Circumference Ex fixation @ calc fx - 1+D

ROM

[redacted] UE appear actively WNL

[redacted] LE - hips/knees appear

grossly WNL actively

PMH - C-section X3

Flexibility

Bed Mobility

Transfers Will assess c WB orders & Up orders

Gait

Pt on Bed Rest, no WB orders

Order Eval & Rx restrictions per 1<sup>st</sup> service

[redacted] 95 - Up in chair

A: Problems: (1) w/d bed mobility (2) w/d transfers (3) w/d ambulation, (4) w/d balance/coordination 20 [redacted] surgery

Rehabilitation Potential: Good

Goals: See Progress Note.

P: Pt to be seen QD to BID for ambulation gait training, bed mobility, transfers and therapeutic exercise.

Thank you for this referral.

Signature [redacted]



[REDACTED]		PT. NAME, RM. NO. [REDACTED]	
Hx	DATE OF REFERRAL [REDACTED]	REFERRING PHYSICIAN [REDACTED]	MED. REC. NO. [REDACTED]
[REDACTED]		AGE, SEX, INS. [REDACTED]	
DATE OF EVAL / DC [REDACTED]		ADM. DATE [REDACTED]	
DOMINANT HAND [REDACTED]		ADM. NO. [REDACTED]	
DATE OF INJURY/INSULT [REDACTED]		PHYS. [REDACTED]	

DIAGNOSIS	PRECAUTIONS
Mol. Trauma (RT Calcaneal Fx, LT Lisfranc Fx, distal Metatarsal Fx)	↑ Up in chair Keep leg elevated (P)
PHYSICIANS ORDERS	
Tx + eval for ADL's	
PREVIOUS HISTORY/MEDICAL PROBLEMS 41yo W/F MVA 6 weeks ago RT bone loss + dead space now Grade II open RT Calcaneal Fx (C) trans-metatarsal Fx - dislocation (P) pneumo, RT Chest wall (C) laceration scalp laceration Hx Asthma, RT Rib Fx's	

**FAMILY AND HOME SITUATION**

LIVES WITH Family

NUMBER OF FLOORS 1

NUMBER OF STEPS INTO HOME 1

OCCUPATION NA

LEISURE at spend time w/ kids (3)

VISION Glasses

HEARING WFL

S PATIENT/SIGNIFICANT OTHER'S STATED GOAL(S):

**SYNERGY PATTERN (MOVEMENT PRESENT)**

RIGHT WFL LEFT WFL

PAIN (P) Rest

EDEMA 0

SENSATION (GENERAL SENSATION) UE, WFL

FUNCTION OF UPPER EXTREMITY

	RIGHT	LEFT
NON-FUNCTIONAL		
GROSS FUNCTIONAL		
FUNCTIONAL ASSIST		
FUNCTIONAL	<u>x</u>	<u>x</u>

TRUNK BALANCE (S) bss sit

**AFFECTED EXTREMITY**

	RIGHT	LEFT
RANGE OF MOTION	RIGHT AROM <u>WFL</u>	LEFT AROM <u>WFL</u>
	PROM	PROM
	RIGHT	LEFT
SHOULDER	ABD <u>WFL</u> FLEX <u>WFL</u>	ABD <u>WFL</u> FLEX <u>WFL</u>
ELBOW	EXT <u>WFL</u> FLEX <u>WFL</u>	EXT <u>WFL</u> FLEX <u>WFL</u>
WRIST	EXT <u>WFL</u> FLEX <u>WFL</u>	EXT <u>WFL</u> FLEX <u>WFL</u>
STRENGTH	GENERAL GROSS UE STRENGTH	
	RIGHT	LEFT
SHOULDER	ABD <u>good</u> FLEX <u>good</u>	ABD <u>good</u> FLEX <u>good</u>
ELBOW	EXT <u>WFL</u> FLEX <u>WFL</u>	EXT <u>WFL</u> FLEX <u>WFL</u>
WRIST	EXT <u>WFL</u> FLEX <u>WFL</u>	EXT <u>WFL</u> FLEX <u>WFL</u>
HAND STRENGTH	RIGHT	LEFT
GROSS GRASP	<u>good</u>	<u>good</u>
LATERAL PINCH	<u>good</u>	<u>good</u>
3-JAW CHUCK	<u>good</u>	<u>good</u>
COORDINATION	RIGHT	LEFT
9 HOLE PEG	<u>good</u>	<u>good</u>

PATIENT'S TENTATIVE DISCHARGE PLANS Rehab

**HEAD CONTROL** WFL

**CNS/SENSORY INTEGRATION**

ORIENTATION WFL

ATTENTION SPAN WFL

LEVEL OF ALERTNESS WFL

COMMUNICATION WFL

PRAXIA WFL

NEGLECT WFL

AFFECT WFL

MEMORY WFL

**ACTIVITIES OF DAILY LIVING**

EATING indep

GROOMING (S)

DRESSING own (S)

TOILETING bedpan Max

BATHING Mia L8

BED ACTIVITIES (S) long sit -> bss sit

TRANSFERS TO Eval

**VOCATIONAL/DRIVING POTENTIAL** further address

A Pt is problem areas in dressing transfers and home situation

P LTG Pt to benefit OT to maximize functioning in ADL act.

STG By PIC pt to be mod (I) w/ level of care - husband and he will measure door frames and in for BB or pass other in bed need.

Therapist's Signature \_\_\_\_\_ DATE \_\_\_\_\_

Occupational Therapy Initial/Discharge

OF

705

Re-evaluation due:

\*Re-evaluation\*

DATE	1/95	1/95	1/95	-95	-95
Time in Treatment	60 min.	45 minutes	30	30	
Treatment Plan	bed mobility, transfers, gait training, therapeutic exercise				
SUBJECTIVE	Initial Evaluation pt very drowsy, crying in chair?	Resume pre-op order received. pt has been on hold. Open CS-calls fr - repeat I & D,	PE A & DX3, SCD's BLE, IV, ① blue bolsters supporting	occasional difficulty focusing on medication	asked to ADL's. Bed <-> w/ chair on chart.
GOALS/TREATMENT	BS Advanced	BSICU →	BLE, Heart monitor, Sat monitor, ROM - ② UE WNL	BS	BS
① Roll ② move	Initial Eval done	dressing ② ③ pt disreintubated after surgery. ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿	② UE shoulder pt guarding core main. flexion to	pt up in stretcher chair when seen	Aspire to long sit & min (A) + encouragement
② Sidelying → sit MOD I	See for details	I & D, subclav arthrodosis, neck abdominal flap coverage. ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿	③ LE hip & knee WNL, ankle	Spoke 2 MD asked if pt could have 1st step mattress to facilitate better transfers.	5 min x 2 (S) NA
③ Sit ↔ Stand min (A) → CG		Sensation intact ② to orders - upon Chair BID, elevate ② in chair all times	④ NT MMT - ② UE ③ UE deltoid Remainder ④ LE - hip flexors & knee	Rx you UE exercises & strengthening. ② ③ Hands encouraged pt to pull forward	NA
④ Pt to amb 30 x 1 core assistive device min (A) → CG		no WB status provided at this time chart review completed	flexor: extensors remainder NT. A: Pt NWB ② - Problems are as previously	to move erect sitting posture. A + ARON for shldr ✓ elbow ✓, A: Pt has very low	② ③ SLR X3
⑤ Pt to amb ② curb step min (A).	P: Pt to be seen AD to BID as schedule permits for the above Rx.	Re-evaluation Reluctant to do things, move arms, perching, has been up in chair BID	Stated. Tol. Eval well. P: Pt to be seen AD BID for bed mobility, transfer training & therapeutic exercise. Thank you for the referral.	endurance w/ way of anything new P: Continue.	A: Tol Rx well P: cont
Therapist					

Ont above  
Pt not seen. Will try to contact  
ask for post-op resume  
WBing clarification → 2.

RIO-8 10/92

pt to having x-ray done this A.M. P.M just back to bed, P being  
up in chair one hr. Fatigued. Will continue  
pt up in chair eating lunch will start attempts today.

RIO: OT (PT) RT ST Progress Notes

Re-evaluation due:

DATE	[REDACTED]				
Time in Treatment	15 / 0 / 0	0 / 30	30	15	45
Treatment Plan					
SUBJECTIVE	pt up in chair this P.m. cont to be in chair	pt getting Bath	Husband Present for Rx.	φ family for ERROR VT	
GOALS/TREATMENT	BS	BS C.O.T.	BS	BS	BS → dept
Goal Mobility ① roll ② mod ③		mod ① #1 Goal Met Supine → sit mod ① #2 Goal Met			① Supine → Long sit ①
transfers ② Bed ↔ w/c ①		③ Bed ↔ w/c NW B + Backward needed the Chair field.	Bed ↔ w/c mod ① Backwards someone needs to hold Chair	BS Commode to Bed mod ①	①
④ W/C Mobility Pt to be able to safely use w/c for transportation.				Will work on in A.M.	① Demo one step + then did it with her in chair
⑤ Bed Mobility ① in all	work done low Ex in Chair mod ①	Goal 1 & 2 met	① Roll ② sit ↔ supine & trap Seating	①	① A: did well C Rx
	A: tol Rx well P: cont P.m. for Chair	A: tol Rx well Lab 3-4 hold 20 to NW B Stakes P: cont Lab updated.	A: tol Rx well P: Will teach husband step (one) into house on [REDACTED]	A: Pt doing Very well Progressing P: cont.	P: Will demo step to husband before D/c home today
Therapist	[REDACTED]				

Re-evaluation due:

DATE					
Time in Treatment	30'	45' / 30'	30'	30'	30'
Treatment Plan	Discharge				
SUBJECTIVE	Referral Read Chart Reviewed Goals discussed	Dizzy mental sit	I'd like to stay up for awhile	PT fearful when talking about her daughter.	have mid-wic
GOALS/TREATMENT	BS	BS / BS	BS	BS	BS PT vomited s/p PTTx
1. <u>ADL</u> w/dress LE ⑤ bath ⑤	UE Lim WFL	Real completed Tall to husband re	undervare ⑤		⑤ ice fud ⑤ ⑤ down ⑤ bath Met
2. <u>Transfer</u> w/c transfer c m n ⑤ w/c commode	See eval	measurements. for chair + doors out home.	bedact Mod ⑤ Transfer to w/c backing up not PT move to have her telling how to transfer.	⑤ to bs Commode ⑤ bed act	⑤ Transfer w/c + commode  Met
3. <u>home</u> recom needs		Bedact ⑤ Udress ⑤ Balance good Donned pants ⑤	Plan to stay in Chair for short time + friends Able to verbalize how to get back to bed.		bs commode bed + w/c ordered for home Cogn + UE WFL
		Transfer to w/c (Bedact ⑤) backing into w/c + ⑤ holding Chair and rebrng to bed forward ⑤	would like to try bs Commode next and bring to c m n. 10/10/92.	PT fit out of Splint + angle c m n + plank PT to tell R/O w/c change	Recomm home plan + instruction of transfer etc. not after OT with w/c allowed thru for home care
	Order written Recd chf order. Will start ASAP	Doing well Tolerated trans. will try sliding bd transfer + commode as abel	Talked to Dr Cable re did get PT OOB	dressing to better position  Pm pt getting splint changed	Met STG. Family involved Progress made all 4 areas Seems to be doing Drake to give input Aware of safety Satisfied with and tolerate stx PT should down Per her report she has ⑤ meals from friends
Therapist					

→ PT not seen 2° to visiting daughter Chart normal

Re-evaluation due: [REDACTED]

DATE	[REDACTED]			
Time in Treatment	15/15			
Treatment Plan	D/C Summary			
SUBJECTIVE	Pt. Discharge for D/C home and husband reported this feeling also yet on 11			
GOALS/TREATMENT	Rx Sessions			
Bed mobility	#1 Goal Met			
① Roll ② mid ③	Ⓡ			
② sidelying ↔ sit	#2 Goal Met			
mod ③	Ⓡ			
Transfers	#6 Goal Met			
⑥ Bed → w/c	Ⓡ			
W/c mobility	Ⓡ Goal Met			
⑦ p/t to be able to safely use w/c for transport later on	Reviewed Atpt + Van transfer + Husband ③			
Bed mobility	③ Atpt.			
8 ③ in ALL	Ⓡ Goal Met			
<p>A. Goals 3, 4, 5 (NA) - all goals met!</p> <p>Pt. Discharge from family + friends all equipment received w/ Bed &amp; BS commode no further P.T. needed until WB status read</p>				
Therapist	[REDACTED]			

**MEDICAL RELEASE**

(Patient or Legal Guardian)

(Physician or Hospital)

radiologists reports) pertaining to the nature and extent of injuries sustained by

(Patient)

(Date)


is sponsored by the

interior design, occupant restraint systems, and occupant injuries. The name of the patient and

(Date)

(Patient or Guardian Signature)

☒ FS  
☒ ER  
☒ HP  
☒ DS  
☒ CONS

	PT
	ST
	OT
	MM
	EKG

☐ AUDI  
☐ PED  
☐ OP  
☐ Surg

COPIED BY  
MED-COR

☐ ITEM  
☒ LAB  
☒ X RAY  
☒ MN  
☐ ORTHO  
☐ OTHER



PATIENT'S LAST NAME FIRST NAME MIDDLE NAME ROOM & BED NO. MED. RECORD NO.

ADDRESS COUNTY OF RESIDENCE

DATE ADMITTED HOUR DATE OF BIRTH AGE BIRTHPLACE SEX RACE RELIGION

ATTENDING PHYSICIAN DR. CODE MED. CODE REV. CODE REFERRING PHYSICIAN AND LOCATION

ADMITTING DIAGNOSIS OR CHIEF COMPLAINT FORMER PATIENT MED. SURG. YES NO

PARENT OR GUARDIAN LAST NAME FIRST NAME & MIDDLE INITIAL PHONE NO.

ADDRESS same as above

EMPLOYER OF PARENT OR GUARDIAN HOW LONG EMPLOYED

PERSON TO NOTIFY OTHER THAN PARENT OR GUARDIAN MRS.

BLUE CROSS CONTRACT NO. EFFECTIVE DATE TYPE PAYROLL DEDUCTION PAID DIRECT UNDER NAME OF IN BLUE CROSS PLAN AT CITY & STATE

COMMERCIAL INSURANCE

STATE CRIPPLED CHILDREN'S COUNTY WELFARE S.S. # OTHER

CHILD ENROLLED IN SCHOOL YES NO CARRIER #1 #2 #3

NAME OF SCHOOL ADDRESS WHAT GRADE? TEACHER

FINAL DIAGNOSES DISCHARGED ALIVE DEAD AUTOPSY YES NO

A. PRIMARY RESPONSIBILITY FOR THIS HOSPITALIZATION open Head Injury

B. SECONDARY DIAGNOSIS

C. SURGICAL PROCEDURES Rigid Bronchoscopy

Bilateral Craniectomy and Debridement of necrotic herniated Tracheostomy, Gastrostomy tube cerebral tissue and Camino Intracranial Pressure Monitor Placement

DATE ATTENDING PHYSICIAN

PATIENT NAME:

MR#:

DATE ADMITTED:

ATTENDING PHYSICIAN:

ATTENDING RESIDENT:

HISTORY OF PRESENT ILLNESS:

This is a 7 year old white female who was an unrestrained passenger in the back seat of a car. She was allegedly thrown from the car. I am unsure if the window was open or closed. The patient was found down at the scene.

PAST MEDICAL HISTORY:

Not obtainable as there are currently no family members available. The parents were apparently taken to Miami Valley as they were involved in the trauma as well.

PHYSICAL EXAMINATION:

VITAL SIGNS--

Blood pressure 100/70, pulse 130, temperature 37.0°, respiratory rate - patient paralyzed.

HEENT--

There is a large laceration on the scalp. There appears to be a skull fracture palpable and questionable brain matter in the laceration that may be fat. The patient has deviation of her eyes to the left. Pupils are 3 mm and initially reactive before paralyzation. Nose patent. There is a missing tooth in the lower bridge of teeth. On throat exam, trachea is midline. There are palpable pulses.

HEART--

LUNGS--

Regular rate and rhythm. She has slightly decreased breath sounds on the right side compared to the left.

ABDOMEN--

PELVIS--

EXTREMITIES--

RECTAL--

NEUROLOGIC--

Soft, non-distended. Rock is negative. No noticeable injuries. Pending. Cranial nerves are not assessable as the patient is having decorticate posturing and deviation of the eyes to the left. She has minimally reactive pupils which are 3 mm. The patient is unresponsive. Glasgow coma scale is 4.

LABORATORY DATA:

Hemoglobin is 12.7. The remainder of lab is pending. Chest x-ray revealed a tooth in the carina. Cervical spine is negative. AP and lateral thoracolumbar spine films are negative. Pelvis is negative. CT of the head revealed multiple skull fractures, diffuse punctate contusions, multiple small right intracranial hemorrhages, small right parietal subdural hematoma, positive midline shift, cisterns open, and ventricles are noted to be small. CT of the abdomen is pending. The remainder of labs are pending.

HISTORY AND PHYSICAL EXAM

**PATIENT NAME:**

**MR#:**

**ASSESSMENT AND PLAN:**

The patient had received 25 mg of Mannitol. An NG was placed and patient was intubated. She was reintubated with a cuffed tube when able. A Foley was placed. The patient is being hyperventilated. Fluids are currently being given as patient needs as well as patient receiving a couple of units of blood. The patient was discussed with [REDACTED]. It is likely that the patient will need ICP monitoring, Swan-Ganz catheter, and may need bronchoscopy. The patient is seen with [REDACTED].

PATIENT NAME:

MR#:

DATE ADMITTED:

DATE DISCHARGED:

ATTENDING PHYSICIAN:

ATTENDING RESIDENT:

PRIVATE PHYSICIAN:

ADMITTING DIAGNOSIS:

Open head injury.

DISCHARGE DIAGNOSIS:

-Open head injury.

-Chronic vegetative state.

PROCEDURES:

- ██████████ - Rigid bronchoscopy.
- ██████████ - Bilateral Craniectomy, debridement of necrotic herniated cerebral tissue and placement of Camino intracranial pressure monitor.
- ██████████ - Tracheostomy and gastrostomy placement.

HISTORY OF PRESENT ILLNESS:

██████████ is a 7-year-old female who was the unrestrained passenger in a motor vehicle involved in a high speed head on collision. At the scene, she was evaluated by a physician who was riding with the squad and was unresponsive and exhibiting decerebrate posturing. She was extracted from the automobile and intubation was attempted which was unsuccessful. Upon her arrival at ██████████ in the late night hours of ██████████ she was at that time successfully intubated. She had sluggish pupillary reflexes. The eyes were deviated to the left. There was a large scalp laceration which extended across the midline with exposed skull and obvious fracture. No cerebral tissue was visualized at that time. There were several broken teeth and no obvious injuries to the chest, abdomen, pelvis or extremities.

HOSPITAL COURSE:

When the patient was seen by neurosurgery, she had been pharmacologically paralyzed for her intubation and had been taken to the CT scanner. At that time she was hypotensive with systolic blood pressures in the 50s. A brief examination was performed while she was still on the scanner. She had a large scalp laceration which was partially covered by bandages, the full extent could not be appreciated at that time. There did not appear to be any acute bleeding from that area. However, the dressings were saturated. The paralytic agents were wearing off, she was not moving spontaneously. There was no response to corneal stimulation. There was no gag. There was no response to deep noxious stimuli in the midline. There was no response to nail bed crush and neither hand and no response in the right foot. In the left foot to nail bed pressure there was nonspecific movement in the toes. She was areflexic and the toes were none responding at this time. The cervical spine studies were reviewed and did not show any obvious injury. The head CT scan demonstrated a

DISCHARGE SUMMARY

PATIENT NAME:  
MR#:

skull fracture extending bilaterally that was widely diastatic but only minimally depressed, however. There was a hematoma in the right parietal lobe consistent with laceration of the dura and the cerebral tissue directly below the fracture suggesting that the fracture edge had initially been pushed into the brain tissue. The hemorrhage continued to a depth of approximately 2.5 cm on the CT scan. There was a very small subdural hematoma on the right side which was at its greatest extent at the most 7 mm thick and it was not causing any significant mass effect. There were a number of small punctate contusions throughout both hemispheres basal ganglia and brain stem. The ventricles were very small the ambient cisterns were still present although there were some asymmetry of the lateral recess of the ambient cistern on the right side. The fourth ventricle was open and the basilar cisterns were open.

The patient's Glasgow coma scale on arrival was four and she was initially taken to the ICU where our plans were to irrigate and close the scalp laceration and placed a communal ICP monitor for conservative management of her posttraumatic brain swelling. However on taking down the dressings, we encountered a considerable quantity of necrotic herniated cerebral tissue which had not been present when she arrived in the emergency room which suggested an evolving process with the swelling. Therefore, she was taken emergently to the operating room and the laceration was extended on both sides and the fracture pieces were debrided as was the necrotic brain tissue. Again, a significant quantity of tissue was encountered in the subgaleal space.

Once the tissue had been removed the dural edges were inspected in the area of the fracture on the right side. The dura was lacerated and shredded into several pieces it could not be primarily repaired and because of this being an open injury we felt performing a duraplasty at this time would be unadvisable because of the infection risk. After the craniectomy, the tissue appeared to be relatively flat and there was no ongoing herniation of tissue. At that point, the wound was closed primarily with the bone fragments left out leaving a large bilateral decompressive craniectomy.

An ICP Monitor was placed and the intracranial pressure was noted to be 13 mmHg of Mercury, this with hyperventilation being maintained. From there, she was taken directly to CT scan and this study demonstrated that ventricles and cisterns were considerably more patent. There was hemorrhagic contusion in the area of the herniated brain but no mass effect. The small subdural that had been present previously was not appreciable.

The patient was admitted to the [REDACTED] and maintained with hyperventilation and osmotic agents as well as pressors to maintain adequate cerebral

DISCHARGE SUMMARY

**PATIENT NAME:**

**MR#:**

profusion pressures. The first two days the ICP's ranged from the 20 to 30 range and cerebral profusion pressures were tenuous but could generally be maintained in the 50s. As time progressed, the intracranial pressure became more easily managed and the cerebral profusion pressures came up and we were able to wean the Nembutal and Dopamine and then eventually wean hyperventilation and the Mannitol while maintain excellent intracranial pressures. The patient's ICP monitor was removed on the [REDACTED] during the proceeding 24 hours her ICP had ranged from 7 to 13 and her cerebral profusion pressure 56 to 103. A CT scan that same day demonstrated that she had resolved the small punctate contusions. There was still an area of rather significant cephalomalacia on the right posterior frontal and parietal area and a small area of edema in the left frontal region. However, there was no mass effect. The intrahemispheric fissure was open. The Sylvian fissures were open. The ventricles were of normal size and configuration. The basilar cisterns and ambient cisterns were all normal in appearance.

The patient remained in coma vigil. She became markedly hypotonic especially of the lower extremities and could not be maintained with splints and was begun with serial casting. The patient was maintained on Claforan and Clindamycin for aspiration. She had had significant aspiration with collapse of the right lung at the time of her presentation and during the same anesthetic as her intracranial procedure was performed she underwent rigid bronchoscopy for removal of large food particles from the right bronchial tree. Despite this, all of her cultures remained negative with exception of normal Flora and colonization with Staph. She continued to have fevers associated with tachycardia, tachypnea, diaphoresis, increasing tone and it was felt to be consistent with anergic storming. This responded well to doses of Thorazine and she was placed on Clonidine patch which significantly decreased the frequency and severity of these spells as well. Because she was not becoming responsive and remaining in a coma vigil, she underwent placement of a G-tube and tracheostomy which she tolerated well. The tracheostomy was changed on postoperative day five from that procedure.

Other problems encountered during her hospitalization was hyponatremia not associated with diabetes insipidus and this was treated with increase of free water in her tube feeds and she responded well with that.

**DISCHARGE PLAN:**

She is discharged on hospital day #20. She remains in coma vigil, but has long alert periods and we are very hopeful that she will regain responsiveness and interaction with outside stimuli. She has a G-tube and tracheostomy in place and has casts on both lower extremities which should be changed weekly. Her current medications are Zantac 50 mg b.i.d., Catapres TTS-1 patch replace every 7 days, Thorazine 10 mg every 6 hours p.r.n. basis. Her



**DISCHARGE SUMMARY**



PATIENT NAME:

MR#:

tube feeds are Traumacal 0.5 strength at 125 cc per hour. At the time of her discharge her electrolytes: Sodium 147, potassium 3.7, chloride 107, Bicarb 25.6, BUN 22, Creatinine 0.5 and glucose 135. Her hemoglobin and hematocrit are 12.8 and 38.0 respectively, platelet count is 467,000, white count is 14.2 with 67% segs, 6% bands, 16% lymphs, 8% monocytes and 3 eosinophils. Blood cultures, sputum cultures and urine cultures are no growth at this time. She has a large craniectomy defect and we anticipate repairing this with Titanium Methylmethacrylate cranioplasty in 6 to 12 months. There is a resolving subgaleal hematoma.



DISCHARGE SUMMARY

PATIENT NAME:

MR#:

DATE OF CONSULTATION:

REQUESTING PHYSICIAN:

CONSULTING PHYSICIAN:

**HISTORY OF PRESENT ILLNESS:**

This is a 6 year old female who was an unrestrained occupant in the back seat in a vehicle involved in a high speed head on collision. She was catapulted through the front window and found outside the car by the emergency medical personnel with bilateral spontaneous decerebrate posturing. She was brought to [REDACTED] where she was noted to still be posturing and she was paralyzed and intubated. She was sent for CT scan after her initial evaluation by the trauma team. A neurosurgical consultation was requested as the patient was being sent for CT scan. On my arrival here, the patient was in the CT scanner. She was hypotensive with systolic blood pressures in the 50's.

**NEUROSURGICAL EVALUATION:**

The patient was briefly examined between radiographic studies. The examination revealed a large scalp laceration which is partially covered by bandages, so full extent cannot be appreciated. There does not appear to be any actual bleeding from this at the moment. However, the dressings are significantly saturated with blood. The child is no longer paralyzed, but is not moving. She is being hyperventilated, but despite vigorous efforts, the PCO2 at this time is 37. On 100% FIO2, the PAO2 is 139. The pupils are 2.5 mm bilaterally and non-reactive. There is a piece of glass embedded in the center of the left cornea and a horizontal abrasion across the middle of the right cornea. There is no response to corneal stimulation. We cannot check oculocephalics at this time. There is no gag reflex. There is no response to deep noxious stimuli in the midline. There is no response to nail bed crush on either hand or in the right foot. There is some non-specific movement of the toes in the left foot with nail bed pressure. There was no response to arterial punctures. There are no elicited reflexes or Babinskis at this time.

The cervical spine studies are reviewed and the odontoid is of limited quality secondary to overlay of the teeth. However, the AP and lateral cervical, thoracic, and lumbosacral spine show no evidence of fracture, dislocation, or soft tissue injury.

The head CT scan demonstrates a minimally depressed skull fracture extending biparietally, but more extensively down the right side than the left. As it crosses the sagittal suture, that suture is diastatic. It is not associated with an epidural hematoma. There is a small subdural hematoma on the right side

**PATIENT NAME:**

**MR#:**

measuring approximately 7 mm in its thickness, but not causing significant mass effect at this point. There is a contusion underlying the fracture line which has a linear appearance suggesting a cortical laceration and possibly a dural laceration as well. There are multiple small punctate contusions throughout both hemispheres, basal ganglia, and brainstem. They are more concentrated on the centrum semiovale. The ventricles are very small, but the ambient cisterns are open at this time although there is some asymmetry of the lateral recesses of the ambient cistern with the right side being somewhat deformed. The fourth ventricle is open. The basilar cisterns are open.

**IMPRESSION:**

Severe head injury with skull fracture, multiple contusions, and subdural hematoma. There is midline shift, but it seems to be more associated with the multiple contusions rather than the subdural hematoma. The Glasgow coma scale is 4 and she gets a sole point for the decerebrate posturing at presentation. The prognosis for his head injury is very poor. I think that attempts to evacuate the small subdural hematoma at this time would result in more harm than benefit. We would recommend not taking her to the operating room and subjecting her to a general anesthetic. I suspect that her hypotension currently is secondary to blood loss, and we would recommend giving her colloid until blood is available and then transfusing her empirically. We would like to place a Camino ICP monitor and will plan on aggressive management with hyperventilation and osmotic diuretics and possibly inotrope and pressor therapy if required. We will debride the laceration at the bedside and perform a primary closure. If at some time the child returns to the operating room and it is felt that further debridement is required, it can be done at that time. A follow-up head CT should be obtained in six hours or sooner should there be any abrupt changes in the intracranial pressure. There is a good likelihood that the subdural may enlarge, the contusions may enlarge, or she may develop a bone edge epidural hematoma which will require surgical evacuation. We will be prepared to do that should those problems occur. Otherwise, our recommendation would be to manage her with aggressive medical interventions.

**ADDENDUM:**

The patient is out of the CT scanner and a more thorough examination can be performed. The bandages over the head are taken down and there is a large open scalp laceration extending biparietally. There is herniation of brain tissue through the associated fracture.

This child will need surgical debridement and repair of the dural laceration. Our plan will be to leave the bone out and hopefully we will be able to achieve adequate

**PATIENT NAME:**

**MR#:**

dural closure. We will need to see at the time of surgery whether or not the subdural can be removed to any benefit to the patient without resulting in more significant loss of cerebral tissue.

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST: TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☒

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

7 y/o slip MVA head injury - hit windshield  
& flying from car. C/S for vent mgt

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

HA - 7 y/o W/F transported to CMC 2° MVA, c depressed skull fx, small subdural hematoma, multiple cerebral contusion & now c decerebrate posturing. Pilo. c/s'd for vent mgt. Pt apparently seizing on scene of accident, given Ativan in ED. Now intubated. Pt also c tooth @ Cauda of lung PMH of hosp of surg. of med problems meds none NKDA

BIT C/S of problem

PE 35.8 - 114 - 95/40 30/30

intubated, unconscious, decerebrate posturing  
HEENT lg skull lac. pupils ~3mm, minimally reactive  
dark, prominent @ eye.

heart RRR 3 @ lungs BS ↓ @ side @ rhonch @  
abd soft NO mass of HSM.

neuro as above reflexes 2+, ? w/d to pain

ABG 6.81/59.8/191/9.5/-27.3

7.25/32.5/135/16/-10.1

7.3/44

CXR tooth @ caudal  
repeat CXR - collapse of @  
lung. loc tooth

CT abd e. other labs pending

1. Head injury 2° MVA - Pt to go to surgery per Dr. Chappano. Surgery to remove tooth @ c up to bronch, ophth c/s in AM for @ corneal abrasion @ eye  
2. Resp - Vent settings IMV 30, VT 300 cc, PEEP 2, IT 1.0. Will adjust to keep Pco2 ≤ 30. Cmt pulse ox. trended.

Sidel S Gulland

SIGNATURE OF  
CONSULTANT:

SERVICE:

TIME:

DATE:

FORM 3303-66

CONSULTATION REPORT

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☐

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

8 WQ

IN MVA UNCONSCIOUS

GLASS IN EYE (REMOVED)

Pupils 5.2 slowly reactive

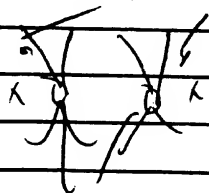
SLG



SLL

CON EDema

FUNDUS splinter floor



Intellidema OU

1 WQ) exposure Keratopathy both eyes

2) Intellidema with some splinter Hemorrhages consistent with intracranial Disease

3) NO corneal Abrasion No blood in eye on

Plan: Lacriforme Ointment

1) would TAPE Lids shut to keep them closed with clear tape. Don't need very much TAPE

3) Flu when ALERT to vision

SIGNATURE OF  
CONSULTANT:

SERVICE:

TIME:

DATE:

FORM 3303-66

CONSULTATION REPORT



CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☐

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

24 yo W F involved in severe MVA resulting in being thrown from the vehicle; has severe open (depressed) skull fracture and (L) pneumothorax and has been

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

unresponsive since the event. ICP 20-25 mm Hg AM systolic BP 100-110 on dopamine of 10-13 mg/kg/min. HR's initially 130's-150's, now over past 36 hours varies 60-100. No known or suspected hx of syncope in the past.

T36° P64 RR16 BP 100/46

Unresponsive

Centrally pink, well perfused

pulses very strong

Precardium quiet, no thrill

S<sub>1</sub> & S<sub>2</sub> soft, split, no click or gallop

No M in systole or diastole

liver not enlarged

Hct 30 WBC 9,900 46P/22B/124L/7M/1E

Glucose 109 BUN 12 Cr 0.5 141/110 36/16

Rhythm strip suggests sinus rhythm & occasional junctional escape, rates 40-50

CXR - Normal heart size and vascularity

IMP - 24 yo & severe brain injury and elevated ICP  
Now hemodynamically stable with periods of sinus bradycardia & junctional escape

This is a stable rhythm, most likely centrally mediated, and does not require therapy at this point - other than what is being done to control her intracranial pressure.

Atropine could be used in an emergent situation to speed sinus node rate, but not appropriate at this time

SIGNATURE OF  
CONSULTANT:

SERVICE:

TIME:

DATE:

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☐

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

~~REDACTED~~ PHED SURF  
Now

Now F THROWN FROM CAN

~~REDACTED~~ SURF CHIT

INTUBATED - COMATOSE

NEEDS TRACH FOR PROLONGED

INTUBATION AND G-TUBE

PLACEMENT FOR LONG TERM NUTRITIVE  
REQUIREMENT.

RE:

INTUBATED, COMAT

PROF. SORT NT,  
HEUC

A.D.

① OR SURGEON FOR MONDAY  
① TRACH / ② G-TUBE

SIGNATURE OF  
CONSULTANT:

FORM 2303-2 SCHEIDT UCI FOR  
JONON

CONSULTATION REPORT

TIME:

DATE:

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☐

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED: Admitted to [REDACTED] 7 Y.O. ♀ diagnosed  
C CHI 2° to being thrown from car. CAT SCAN on [REDACTED] showed  
significant cerebral swelling persists following hemorrhagic contusions & repair  
of comminuted skull fracture, Pt has tracheostomy and g-tube placement.

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

[REDACTED] WAS seen for a speech-language evaluation by  
the recommendation of [REDACTED]. [REDACTED] WAS assessed through  
use of informal measures. RESULTS are as follows:

PER [REDACTED] pediatric levels of consciousness,  
[REDACTED] is functioning at Coma level IV (Gives generalized  
response to sensory stimuli). [REDACTED] is currently giving a  
generalized reflex response to painful stimuli. She is responding  
to repeated auditory stimulation & increased activity.

It is recommended that [REDACTED] receive coma  
stimulation on a daily basis. Recommendations for environmental  
control have been posted in her room and explained to  
[REDACTED]

Thank you for this referral

SIGNATURE OF  
CONSULTANT: [REDACTED]

SERVICE:

TIME:

DATE: [REDACTED]

---

CT HEAD/FACE  
MULTIPLE TRAUMA

---

EH

EMERGENCY CT OF THE HEAD AND FACE:

Clinical history: A 10-year-old female unrestrained passenger in a motor vehicle accident with head and facial trauma.

Technical: Transverse 5 mm scans were obtained through the face from the hard palate to the roof of the orbits. Transverse 5 mm scans were then obtained through the posterior fossa with 10 mm scans through the remainder of the brain. Soft tissue and bony windows were filmed.

Findings: There is a large amount of soft tissue swelling in the facial region, especially over the left orbit and frontotemporal region. There is a fracture through the right frontal bone which extends through the right frontal sinuses and into the cribriform plate. Linear fracture across the roof of the right orbit is also demonstrated. There is a non-displaced fracture through the lateral wall of the left orbit. A fracture through the roof of the left orbit is also suspected. The right lamina papyracea is disrupted with a small fragment of bone displaced medially deviating the medial rectus muscle. There are air fluid levels in the sphenoid sinuses bilaterally with fluid throughout the ethmoid sinuses. The mastoid air cells are symmetrically aerated. No radiopaque foreign body is identified.

The lateral and third ventricles are small but not completely obliterated. There is a hemorrhagic contusion in the right frontal lobe and probably the left frontal lobe as well. No shift of midline is identified. There is gray-white differentiation in the cerebral

Continued on Page 2

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

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CT HEAD/FACE  
MULTIPLE TRAUMA

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Page 2

hemispheres. The suprasellar cistern is preserved. There is also pneumocephalus with air in the right frontal region adjacent to the fractures.

**IMPRESSION:**

1. MULTIPLE FACIAL FRACTURES THROUGH THE RIGHT FRONTAL SINUS AND CRIBIFORM PLATE AS WELL AS THE LATERAL AND SUPERIOR WALLS OF THE ORBITS BILATERALLY. THERE ARE ALSO FRACTURES THROUGH THE MEDIAL WALLS OF THE ORBITS BILATERALLY. ON THE RIGHT, SMALL FRAGMENTS OF BONE ARE DISPLACED TOWARD THE MEDIAL RECTUS MUSCLE. THERE IS BLOOD THROUGHOUT THE SPHENOID AND ETHMOID SINUSES WITH FLUID LEVELS ALSO DEMONSTRATED IN THE MAXILLARY SINUSES.
2. SMALL HEMORRHAGIC CONTUSIONS ARE DEMONSTRATED IN THE FRONTAL LOBES BILATERALLY.

EMERGENCY CT OF THE ABDOMEN AND PELVIS:

Clinical history: A 10-year-old female involved in motor vehicle accident.

Technical: A helical scan of the abdomen and pelvis was obtained during the intravenous bolus injection of 80 cc of Isovue 300. No adverse reaction to IV contrast was recognized. Beam collimation was 10 mm and table speed was 10 mm/second.

Findings: There is a nasogastric tube in position with the tip in the antrum of the stomach. The liver and spleen enhance normally. Multiple out of field artifacts project through the posterior portions of the spleen and liver. No definite parenchymal injury is appreciated. The kidneys enhance and excrete contrast without obstruction or delay. No free intraperitoneal air or fluid is identified. There is a Foley

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

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CT HEAD/FACE [REDACTED]  
MULTIPLE TRAUMA

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Continued on Page 3  
Page 3

catheter in the bladder with an air fluid level in the bladder. Areas of contusion are demonstrated in the posterior lower lobes bilaterally. No pleural fluid or pneumothorax is seen.

IMPRESSION: SMALL BILATERAL LOWER LOBE CONTUSIONS WITHOUT PLEURAL FLUID OR PNEUMOTHORAX. THE LIVER, SPLEEN, AND KIDNEYS HAVE A NORMAL APPEARANCE.

[REDACTED]

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.



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ALTERATION OF ORIGINAL ORDER [REDACTED]  
MULTIPLE TRAUMA CT SCAN OF HEAD WITHOUT CONTRAST [REDACTED]

---

[REDACTED]  
HEAD SCAN - W/O CONTRAST

EH

CT OF THE HEAD WITHOUT CONTRAST: [REDACTED]

Technique: Contiguous 5 mm axial scans were obtained through the posterior fossa with 10 mm scans to the cranial vertex.

Findings: Comparison is made to the postoperative scan dated [REDACTED]. Radiopaque intracranial pressure monitor in the right frontal brain causes marked streak artifact obscuring detail. Numerous surgical staples again cross the frontal region. Brain bulges outward at the skull defect near the vertex. The right parietal portion of the fracture shows increased lateral displacement of the anterior fracture fragment near the vertex. A small amount of residual pneumocephalus is seen beneath the frontal skull. Marked subcutaneous soft tissue swelling is worse on the right than the left. The left sphenoid sinus is nearly completely opacified with a small amount of soft tissue density rimming the right sphenoid sinus. The lateral and third ventricles again appear small and compressed, again with mild prominence of the right temporal horn. The fourth ventricle is normal in size. Midline shift to the left has worsened with subfalcine herniation. Basilar cisterns are small and compressed. Right greater than left parenchymal hemorrhage is again noted with significant low density edema, particularly in the right cerebral hemisphere. A small amount of blood is again seen in the interhemispheric fissure. Edema again surrounds the superior left parenchymal hematoma at the convexity.

IMPRESSION: POSTOPERATIVE EXAMINATION WITH EVIDENCE OF INCREASED SUBFALCINE HERNIATION AND RIGHT-TO-LEFT SHIFT. ASYMMETRIC PROMINENCE OF RIGHT TEMPORAL HORN ALSO SUGGESTS COMPRESSION AND TENTORIAL HERNIATION. PARENCHYMAL HEMATOMAS, RIGHT GREATER THAN LEFT, WITH SIGNIFICANT CEREBRAL EDEMA AND INCREASED FRACTURE DISPLACEMENT.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

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██████████  
HEAD SCAN - W/O CONTRAST

ALTERATION OF ORIGINAL ORDER ██████████  
MULTIPLE TRAUMA

CT SCAN HEAD TO BE DONE ██████████ (PLEASE SCHEDULE AT END OF DAY)

---

EH

CT OF THE HEAD WITHOUT CONTRAST: ██████████

Technique: Contiguous 5 mm axial scans were obtained through the posterior fossa with 10 mm scans to the cranial vertex.

Findings: Comparison is made to the prior study dated ██████████. The intracranial pressure bolt monitor has been removed. Surgical staples again cross the vertex. Comminuted skull fracture at the vertex is again seen with increased outward displacement of the anterior fracture fragments, and protrusion of brain tissue through the skull defect anteriorly. Soft tissue swelling remains in the subcutaneous tissues near the vertex, right greater than left. The lateral ventricles can now be identified and are no longer slit like, and are not enlarged. The third ventricle and fourth ventricle are normal in size. The right temporal horn is no longer enlarged. Basilar cisterns are more readily visible. Some sulci are now visible. Considerable low attenuation remains related to hemorrhagic contusion mainly in the right cerebral hemisphere. The hemorrhagic portion shows interval decrease in attenuation. Significant edema remains in the right parietal lobe as well as the right posterior temporal lobe and to a lesser extent the right frontal lobe. Low attenuation edema is also present in the left frontoparietal region. Some high attenuation blood remains in the interhemispheric fissure posteriorly, although low density fluid is seen anteriorly in the interhemispheric fissure. A thin rim of low attenuation fluid also lies along the right frontal and temporal convexity, possibly representing

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██████████  
HEAD SCAN - W/O CONTRAST

ALTERATION OF ORIGINAL ORDER ██████████  
MULTIPLE TRAUMA  
CT SCAN HEAD TO BE DONE ██████████ (PLEASE SCHEDULE AT END OF DAY)

---

Page 2

small evolving to chronic subdural hematoma. No similar extra-axial fluid is seen along the left convexity. Some gray-white matter differentiation is identified. The sphenoid sinuses are nearly completely opacified bilaterally with opacification of numerous ethmoid air cells also. Previous midline shift has nearly resolved but is still minimally present at the level of the lateral ventricles.

**IMPRESSION:** SIGNIFICANT CEREBRAL SWELLING PERSISTS FOLLOWING HEMORRHAGIC CONTUSIONS AND REPAIR OF COMMINUTED SKULL FRACTURE. HOWEVER, MASS EFFECT IS SIGNIFICANTLY IMPROVED LEAVING SLIGHT RESIDUAL MIDLINE SHIFT. SMALL EXTRA-AXIAL HEMORRHAGE, LIKELY SUBDURAL, AGAIN NOTED IN THE INTERHEMISPHERIC FISSURE AND ALONG THE RIGHT CONVEXITY. SPHENOID AND ETHMOID SINUS OPACIFICATION.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

☐ Status Report

☒ Discharge Summary

Name: [REDACTED]	DOB: [REDACTED]	Age: 64	MR#: [REDACTED]
Begin TX: [REDACTED]	End TX: [REDACTED]	Ref. Physician: [REDACTED]	
Diagnosis: S/P Traumatic Brain Injury			
<input checked="" type="checkbox"/> Occupational Therapy	<input type="checkbox"/> Physical Therapy	<input type="checkbox"/> Speech Therapy	

Medical Background: Pt unrestrained passenger in MVA. ~ thrown from car. Skull fracture, multiple contusions. Subdural hematoma in middle left. Post following surgery shows Temporal lobe in thick @ post frontal/parietal lobe. Limbs injured.

#### INITIAL ASSESSMENT AND GOALS

Patient was evaluated on [REDACTED]. Initial observations included: Full UE PROM & stiffness w/ resistance cont. ICP monitor in place. Unresponsive to commands.

Initial long-term goal (s): Maintain PROM of hands.

#### Current short-terms goals:

1. Pt will tolerate (B) hand splints 3 hrs or 1 hr off 5 skin breakdown w/ Δ in ICP's or vitals.

#### INTERVENTION

Therapy consisted of: Monitoring of UE splints & UE PROM, positioning daily. No aggressive PT per Dr. Chapin.

Attendance/Behavior: Pt unresponsive. Father - family being involved.  
Pt periods of agitation.

Adaptive equipment used: (B) UE; LE splints.

### CURRENT STATUS

Pt is following of commands. & resistance not in elbow - elbow, wrist & fingers - Pt is agitation.  
+ Eyes opening & tracking auditory & visual. (D)  
all ASL's Pt's behavior more consistent. Gaze to  
Angeles cognitive level II to III. & vocalizations decr.  
Spont. movement of all extremities R & L

### RECOMMENDATIONS

Recommend intensive home stroke/rehab program (inpt)  
& multidisciplinary.

Thank you for allowing us to participate in the care of this patient. If questions arise concerning the course of treatment, please contact

Therapist:

CC:

☐ Status Report

☒ Discharge Summary

Name: [REDACTED]	DOB: [REDACTED]	Age: 7y.o.	MR#: [REDACTED]
Begin TX: [REDACTED]	End TX: [REDACTED]	Ref. Physician: [REDACTED]	
Diagnosis: CHI 2° to MVA on [REDACTED]			
<input type="checkbox"/> Occupational Therapy	<input checked="" type="checkbox"/> Physical Therapy	<input type="checkbox"/> Speech Therapy	

Medical Background: Pt. is a 7y.o. ♀ victim of MVA on [REDACTED]. Pt. was an unrestrained passenger thrown from the vehicle sustaining scalp laceration, open depressed skull fr. & dual cortical laceration & laceration of brain tissue & subdural hematoma. Referral received for (B) foot-drop splinting & monitoring pt.

#### INITIAL ASSESSMENT AND GOALS

Patient was evaluated on [REDACTED]. Initial observations included: Pt. initially non-responsive on vent. support & ICP monitor in place & (B) foot drop & ↑ extensor synergy in lower extremities.

Initial long-term goal (s): Prevention of contractures & maximizing function to cognitive level.

Current short-term goals: (1) [REDACTED] will respond to the stimulus (light/sound) & either visual or avoidance regard, 1/3 attempts.  
(2) [REDACTED] will tolerate foot splints for recommended schedule & a significant Δ in V.S.

#### INTERVENTION

Therapy consisted of: PROM/stretching, visual/auditory stimulation & splinting of L.E. & parental education.



Attendance/Behavior: Pt. seen QD/BIP & inconsistent response to stimuli.

Adaptive equipment used: Foot splints & recommendation for ortho to inhibitive cast.

#### CURRENT STATUS

Pt. is a 74.y.o. w ♀ who presents ↓↓ cognitive & motor skills. Pt. presently exhibits skills in the level II-III Range according to the Ranchos Las Amigos Cognitive Scale.

#### RECOMMENDATIONS

Begin intensive rehab program combined w OT/PT/ST.

Thank you for allowing us to participate in the care of this patient. If questions arise concerning the course of treatment, please contact

☐ Status Report

☒ Discharge Summary

Name	DOB:	Age: 7	MR#
Begin TX:	End TX:	Ref. Physician	
Diagnosis: closed Head INJURY 2° to MVA on			
<input type="checkbox"/> Occupational Therapy		<input type="checkbox"/> Physical Therapy	<input checked="" type="checkbox"/> Speech Therapy

Medical Background: please see initial report

#### INITIAL ASSESSMENT AND GOALS

Patient was evaluated on . Initial observations included:

is functioning at coma level IV. gives  
GENERALIZED response to sensory stimuli according to  
pediatric levels of consciousness.

Initial long-term goal (s): NOT ESTABLISHED AT THIS TIME

Current short-terms goals: will physically respond to  
auditory, visual, tactile & olfactory stimulation

#### INTERVENTION

Therapy consisted of: Coma stimulation

Attendance/Behavior: N/A

Adaptive equipment used: N/A

### CURRENT STATUS

Continues to function at Coma Level IV (gives generalized response to stimuli) and appears to begin showing signs of Coma Level III (gives localized response to sensory stimuli) according to pediatric levels of consciousness

### RECOMMENDATIONS

1. Continue coma stimulation

Thank you for allowing us to participate in the care of this patient. If questions arise concerning the course of treatment, please contact

**PATIENT NAME:**

**MR#:**

**DATE OF SURGERY:**

**ATTENDING SURGEON:**

**ANESTHESIA:**

General endotracheal.

**PREOPERATIVE DIAGNOSIS:**

Depressed, open skull fracture with dural laceration and cortical laceration, small subdural hematoma.

**POSTOPERATIVE DIAGNOSIS:**

Depressed, open skull fracture with dural laceration and cortical laceration, small subdural hematoma.

**OPERATION:**

Craniectomy for elevation and debridement of depressed skull fracture, debridement of necrotic brain tissue. Placement of right frontal Camino intracranial pressure monitor.

**ESTIMATED BLOOD LOSS:**

250 cc.

**FLUIDS:**

Colloid 500 cc, crystalloid 542 cc, packed red blood cells 2½ units. Urine output is 390 cc.

**SPECIMENS:**

Herniated brain tissue and elevated bone flaps for permanent section.

**COMPLICATIONS:**

None.

**COUNTS:**

Sponge, needle, and Cottonoid sponges correct.

**INDICATIONS:**

██████████ is a 6-year-old female who was an unrestrained back seat passenger in a high speed motor vehicle accident in which she was ejected from the vehicle through the front window. She was found with decerebrate posturing at the scene. She was brought to ██████████ where she was stabilized and CT scan was obtained which demonstrated depressed skull fracture with small subdural hematoma and a small cerebral contusion which was linear and perpendicularly situated to the skull suggesting cortical and dural laceration from the bone edge of the fracture. Initially it was intended to manage her conservatively as her cisterns were open and there was only a small amount of midline shift from the diffuse axonal

**OPERATIVE RECORD**

PATIENT NAME:  
MR#:

shear injury and minimal mass effect from the small subdural. However, she developed herniation of cerebral tissue into her laceration and she was, therefore, taken to the operating room.

PROCEDURE:

After obtaining informed consent from the father, the youngster was brought to the operating room. Before the neurosurgical procedure was done, a rigid bronchoscopy was performed by [REDACTED] and this is dictated as a separate procedure.

After this was done, the scalp was shaved. The laceration on the scalp was noted to be filled with necrotic, herniated brain tissue. Some of this was collected and sent for pathology. The laceration was irrigated with three liters of Bacitracin-containing lactated Ringer's and then prepped with Betadine gel and draped in a sterile manner.

The scalp was incised, extending beyond the laceration to expose the fracture. This was carried down with the monopolar through the galea and the scalp was reflected in a subperiosteal plane to expose the extent of the fracture. Some loose fragments were debrided. There was additional herniated brain encountered which was irrigated away. The Midas Rex was used to remove the fractured bone pieces by outlining them slightly beyond the fracture line with the B1 attachment. On the right side, an extensive dural laceration was encountered. At the posterior margin of this laceration, there was a cortical laceration. This was the site of the herniating tissue. The bone in this area was removed with the Leksell rongeur, but there were no adequate free dural edges for closure. With the extensive bony resection, there was adequate decompression of what had initially been an extremely tense dura to prevent further herniation of cerebral tissue and the area was, therefore, covered with a piece of Gelfilm. There was no active bleeding from that region and a [REDACTED] drain was placed into the subgaleal space and brought out through a separate stab wound in the skin and anchored with a #4-0 nylon.

The galea was closed with interrupted #3-0 Vicryl and the scalp was closed with staples. A stab wound was made in the mid pupillary line on the right in the area of sturdy bone, but still behind the hairline. The small twister was used to perforate the cranium and the Camino bolt was screwed into the skull. The stylet was used to perforate the dura. The Camino monitor was calibrated and inserted. The initial intracranial pressure was 13 mmHg.

Sterile dressings of Bacitracin, Telfa, and Ace wrap were then placed over all incisions. The patient was taken to CT scan for a follow-up study. The scan showed good bony decompression. The area of contusion had enlarged significantly, however, there was no mass effect and in fact, the temporal horn of the right ventricle was enlarged, but did not appear to be trapped, suggesting a hydrocephalus ex vacuo effect, almost certainly the result

**PATIENT NAME:**

**MR#:**

of the preoperative herniation of brain tissue. The basilar cisterns were widely patent. The patient was then transported back to the intensive care unit in good condition. Upon arrival in the ICU, the intracranial pressure was 5 mmHg.



**PATIENT NAME:**

**MR#:**

**DATE OF SURGERY:**

**ATTENDING SURGEON:**

**ATTENDING RESIDENT SURGEON:**

**ANESTHESIA:**

General endotracheal.

**PREOPERATIVE DIAGNOSIS:**

Multiple trauma with severe skull fracture with brain herniating as well as right upper lobe and multiple atelectasis on the right lower lobe, probably secondary to aspiration of food.

**POSTOPERATIVE DIAGNOSIS:**

Multiple trauma with severe skull fracture with brain herniating as well as right upper lobe and multiple atelectasis on the right lower lobe, probably secondary to aspiration of food.

**OPERATION:**

Rigid bronchoscopy, bronchial lavage, and removal of multiple foreign bodies, mostly food particles.

**ESTIMATED BLOOD LOSS:**

**PROCEDURE:**

Under satisfactory general anesthesia and the usual surgical prep and drape, the endotracheal tube was removed after suctioning the mouth and clearing most of the food particles in the hypopharynx. The scope was then inserted.

At the trachea, food was encountered and was suctioned as well as irrigated with saline. The scope was then advanced into the right main stem where most of the food particles were coming out from all the orifices. As much as six to seven large chunks of foreign material was then removed both by suctioning and by manual removal with the foreign body forceps. Near the end of the procedure, there were still some smaller particles of foreign body, but the scalp and the brain continued to herniate and bleed so that the procedure was terminated so the craniotomy could be commenced.

The scope was then withdrawn and the patient was then reintubated. The plan is to take another x-ray

**OPERATIVE RECORD**

**PATIENT NAME:**

**MR#:**

after the craniotomy and determine if she will further require bronchoscopy. Presumably some of these smaller particles can be suctioned out in either recovery or ICU postoperatively. The patient tolerated the procedure and the surgery was then taken over by [REDACTED].

The above information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

NAME [REDACTED]  
AGE, SEX: 7Y F  
DATE OF BIRTH: [REDACTED]  
DR: [REDACTED]  
ACCOUNT #: [REDACTED]

PATHOLOGY #: [REDACTED]  
DATE RECEIVED: [REDACTED]  
MR #: [REDACTED]  
ROOM #: [REDACTED]

PREOPERATIVE DIAGNOSIS: OPEN SKULL FRACTURE WITH HERNIATED BRAIN

POSTOPERATIVE DIAGNOSIS: SAME

PROCEDURE: CRANIOTOMY

SPECIMEN LABELED: A: SKULL FRAGMENTS  
B: BRAIN TISSUE

-----

GROSS EXAMINATION:

A. Debrided skull fragments. Received in formalin, five fragments of skull bone ranging from 3.9 x 0.6 x 0.4 to 7.5 x 5.0 x 0.4 cm, and 11.0 x 8.0 x 0.4 cm in aggregate. The fragments present irregular borders and linear fractures.

B. Herniated brain tissue. Received in formalin, several fragments of soft, friable, white-gray tissue, the largest 2.3 x 1.1 x 0.5 cm, and 3.0 x 3.0 x 0.5 cm in aggregate. In addition, a 3.0 x 2.5 x 1.5 dark red fresh blood clot. B/3

MICROSCOPIC EXAMINATION:

A. No microscopic examination.

B. Sections show brain tissue with focal perivascular acute hemorrhages, edema and neuronal body contraction. Areas of a fresh blood clot contain fragments of brain tissue.

FINAL DIAGNOSIS:

A. Debrided skull fragments: Skull fragments consistent with fracture, (gross only). PAS 2

B. Herniated brain tissue, open skull fracture with herniated brain: Acute hemorrhagic necrosis, edema and hypoxic changes. PAS 5

The [REDACTED] under the authority of the [REDACTED] is conducting a research investigation into a two vehicle crash which occurred on [REDACTED] on [REDACTED] in the [REDACTED]. Two of the participants in the crash, [REDACTED] and [REDACTED], were transported from the scene and admitted to your medical facility.

[REDACTED] is under contract with the [REDACTED] to conduct this investigation and in this capacity we need to obtain copies of the medical records for [REDACTED] and [REDACTED] which identify injuries they suffered in the crash. Given the severe nature of their injuries, only pertinent medical records identifying these injuries are requested as listed below:

- NOTES  
HAND  
written*
- |  |   |
|--|---|
| <input checked="" type="checkbox"/> FS   | <input checked="" type="checkbox"/> ST    |
| <input checked="" type="checkbox"/> ER   | <input type="checkbox"/> OT               |
| <input checked="" type="checkbox"/> HP   | <input checked="" type="checkbox"/> MM    |
| <input checked="" type="checkbox"/> DS   | <input checked="" type="checkbox"/> EKG   |
| <input checked="" type="checkbox"/> CONS | <input checked="" type="checkbox"/> ECG   |
| <input checked="" type="checkbox"/> OPER | <input type="checkbox"/> PYLM             |
| <input checked="" type="checkbox"/> PATH | <input checked="" type="checkbox"/> LAB   |
| <input type="checkbox"/> PN              | <input checked="" type="checkbox"/> X RAY |
| <input type="checkbox"/> AUDI            | <input checked="" type="checkbox"/> MN    |
| <input type="checkbox"/> PEDS            | <input type="checkbox"/> ORTHO            |
| <input type="checkbox"/> OPTO            | <input checked="" type="checkbox"/> OTHER |

Discharge Summary/Transfer Summary

Emergency Room Record

Surgical Records

Pre-operative Radiology Reports

Medical Consultation Reports

Any additional record(s) which identify patient injury [e.g., pertinent nurses notes which were generated during the initial days following the crash (exclude daily progress reports which monitored vital functions), etc.]

☐ Surg Enclosed are two signed Medical Release Forms from [REDACTED] as required by your medical facility. Prior to the copying task, please contact me at [REDACTED] to discuss copy costs.

You should be aware that [REDACTED] interest in this crash resides with the effectiveness of applicable [REDACTED] and not with passenger identification. Federal law requires the exclusion of personal identifiers from investigative reports to protect the privacy of the crash victim.

Thank you for your cooperation and support. It was a pleasure speaking with one of your colleagues, [REDACTED] concerning this matter. The copies can be mailed to: [REDACTED] "Attention: [REDACTED]"

Enclosures

Dear records requester:

We have received your request for a copy of records maintained by us. We maintain records during a patient's stay so we can provide proper care. Once we have concluded our care of the patient, these records are maintained primarily to facilitate future medical care of the patient. Because the expense of copying records diverts money from our primary mission of providing health care, **we do not provide the service of copying records, packaging and shipping them, and billing for this kind of record request.**

Of course, to the extent permitted by law, the records of a patient may be inspected and copied by the patient (in most cases), his physician, and any other person authorized by the patient or by law, but we do not maintain copy facilities for the public to use. Rather than return your request unfulfilled, **we have referred your request to [REDACTED]**, an independent company (see below), for immediate processing on our premises, which will save you time and inconvenience. **[REDACTED]** will provide the services you requested and is the only medical records copying service to which we are referring requests of this kind.

**[REDACTED]**

#### A WORD ABOUT **[REDACTED]**

**[REDACTED]** is an independent, for-profit company staffed with medical records professionals that serves a number of health care facilities in this area and across the **[REDACTED]** ordinarily forwards to us a retrieval fee collected from requesters like you and also provides without charge a number of valuable copying, mailing, and information management services for us.

PATIENT'S LAST NAME FIRST NAME MIDDLE NAME ROOM & BED NO. MED. RECORD NO.

ADDRESS COUNTY OF RESIDENCE

DATE ADMITTED HOUR DATE OF BIRTH AGE BIRTHPLACE SEX RACE RELIGION

ATTENDING PHYSICIAN DR. CODE MED. CODE REV. CODE REFERRING PHYSICIAN AND LOCATION

ADMITTING DIAGNOSIS OR CHIEF COMPLAINT FORMER PATIENT

PARENT OR GUARDIAN LAST NAME FIRST NAME & MIDDLE INITIAL MED. SURG. YES NO

ADDRESS OCCUPATION

EMPLOYER OF PARENT OR GUARDIAN HOW LONG EMPLOYED?

PERSON TO NOTIFY OTHER THAN PARENT OR GUARDIAN MRS:

BLUE CROSS CONTRACT NO. EFFECTIVE DATE TYPE PAYROLL DEDUCTION PAID DIRECT UNDER NAME OF IN BLUE CROSS PLAN AT CITY & STATE

COMMERCIAL INSURANCE

STATE CRIPPLED CHILDREN'S COUNTY WELFARE S.S. #: OTHER

CHILD ENROLLED IN SCHOOL YES NO CARRIER #1 #2 #3

NAME OF SCHOOL ADDRESS WHAT GRADE? TEACHER

FINAL DIAGNOSES DISCHARGED: DEATH AUTOPSY YES NO

A. PRIMARY RESPONSIBILITY FOR THIS HOSPITALIZATION Multiple trauma

B. SECONDARY DIAGNOSIS

Right medial malleolus fracture  
Closed head injury  
Left pneumothorax  
pulmonary contusion

C. SURGICAL PROCEDURES

Open reduction internal fixation Right Medial malleolus

COMPLICATIONS INCLUDING INFECTIONS:

DATE ATTENDING PHYSICIAN MD.



PATIENT NAME					MED. REC. NO.				
D.O.B.	AGE	SEX	RACE	TRIAGE LEVEL	DATE IN	TIME IN	PATIENT ACCT. NO.		
	11Y	F	W						
CHIEF COMPLAINT:					PRIVATE DOCTOR / BLUEROOM PHYSICIAN				
TIME:	T	P	R	B/P	HT	WT	M2	ALLERGIES	IMMUN STATUS

**NURSING ASSESSMENT**

**NEUROLOGICAL:** AVPU

**PSYCHOLOGICAL:** ☐ COOPERATIVE ☐ CRYING ☐ ANXIOUS

**INTEGUMENTARY:** ☐ PINK ☐ WARM ☐ DRY

☐ ABRASIONS/BRUISES LOCATION SIZE

☐ LACERATIONS LOCATION SIZE

☐ RASH

**CARDIOVASCULAR:** ABNORMAL

**MUSCULOSKELETAL:** ABNORMAL

**EXPOSURES:**

**RESPIRATORY:** ☐ CLEAR ☐ RALES ☐ RONCHI ☐ WHEEZING

☐ UNEQUAL/LABORED ☐ RETRACTIONS ☐ STRIDOR

**ENT:** EARS ☐ PAIN ☐ RIGHT ☐ LEFT

NOSE ☐ DRAINAGE

THROAT ☐ ABNORMAL

**GASTROINTESTINAL:** ABDOMEN ☐ SOFT ☐ FIRM ☐ DISTENDED

BOWEL SOUNDS ☐ HYPERACTIVE ☐ ABSENT

**NURSING HISTORY:**

**CURRENT MEDICATIONS:**

TIME NOTES / EXAM (HPI, ROS, PMH, Soc, Fam, P.E., Tests, Procedures, Diff. Dx., Tx. Options, Data Rev, Repeat P.E., Disch.)

NURSE SIGNATURE

LAB & X-RAY ORDERS	NO / RN / NO	RESULTS	TIME	TREATMENTS / MEDICATIONS
Mauna Paul				
Ua				
Type & Cross	2 units			
C Spinal				
Oral				
Pelvic				
Plankle				

NOTIFICATIONS		TIME	DISPOSITION: <input type="checkbox"/> HOME	FINAL IMPRESSIONS	CONDITION:
ADMITTING RESIDENT NOTIFIED			<input type="checkbox"/> HOLDING ROOM: <input type="checkbox"/> TIME IN	Car occupant automobile accident	<input type="checkbox"/> GOOD
RESIDENT ARRIVED IN E.D.			<input type="checkbox"/> ADMITTED TO DR:		<input type="checkbox"/> FAIR
ORDERS RECEIVED FROM RESIDENT			TIME UNIT NOTIFIED:	ROOM:	<input type="checkbox"/> SERIOUS
POLICE <input type="checkbox"/> SOCIAL SERVICE			TIME TO UNIT:		<input type="checkbox"/> CRITICAL
CORONER					<input checked="" type="checkbox"/> DICTATED
CASE DISCUSSED WITH:					
CASE DISCUSSED WITH:					
CMC TRANSPORT/PRE HOSPITAL ALS: MANAGED BY E.D. PHYSICIAN			<input type="checkbox"/> REFERRED BY PRIVATE PHYSICIAN - CALL BACK REQUESTED		
			MANAGING RESIDENT INITIALS:	MANAGING PHYSICIAN INITIALS:	
				p.o.	

**DATE OF VISIT:** [REDACTED]

**HISTORY:**

History of car occupant of a MVA. This child was brought in by squad. She was an unrestrained passenger in a rare seat in a head on collision with significant damage to both cars. Three other riders were significantly injured. [REDACTED] sister is here with significant head injury.

The squad personnel reports that there was some significant damage to both cars that were involved. [REDACTED] was groaning and responsive initially in the back seat. She was extricated, immobilized and transported here. As she was entering the ED, she developed generalized tonic clonic seizure, vomited a large amount of food content. It's not clear whether the seizure proceeded the vomiting.

**PHYSICAL EXAM:**

She appeared in a generalized tonic clonic seizure when I saw her with eyes deviated to the right. The pupils were symmetrical, responded sluggishly to light. The seizure was controlled with some Ativan IV. She was breathing spontaneously. Had a heart rate in the upper 90 range. The late part of the transport when she was seizing and vomiting, the neck was not immobilized appropriately in spite of her restraints and her c-collar. Her head demonstrated a depressed area of the left frontal scalp with localized contusion with a depressed left parietal frontal region. The depressed area is about 10 x 12 cm. She has raccoon eyes. The face otherwise appears symmetrical. Pupils are symmetrical and still responsive sluggishly to light.

We electively intubated her with induction of sodium Pentothal and Norcuron. The intubation was performed by [REDACTED]. She has a small left upper arm contusion, deformity of the right ankle. Otherwise, no obvious contusions or deformities. Her neck and back were immobilized and her chest appears symmetrical with good chest excursion. Her BP has remained normal. Pulse ox is 100. We are able to ventilate her and oxygenate her easily, after she was electively intubated. Lungs with no rales, rhonchi or wheezes. Heart RRR without murmurs. Abdomen is soft with no organomegaly or masses. Pelvis appears stable. Extremities: Except for the right ankle that appears deformed, no other obvious deformities appreciated.

**MEDICAL DECISION MAKING:**

Trauma panel was obtained. UA was obtained. Films that included c-spine, chest x-ray, pelvis, right ankle were obtained. [REDACTED] will go to CAT Scan for head and abdominal CAT Scan as soon as her [REDACTED] is out of it. Total contact time with [REDACTED] was about one hour. [REDACTED] and the surgery resident were informed about this patient. At this point, the chest x-ray is back and

demonstrates a generous heart size left sided pulmonary contusion. ET tube is in place. NO evidence of rib fractures.

**TREATMENT:**

**DIAGNOSIS:**

Multiple trauma secondary to  
car occupant MVA

NAME [REDACTED] DATE [REDACTED]  
AGE 11 SEX F APPROX. WT. ~40KG  
ARRIVAL TIME 21 TYPE OF TRANSPORT SQUAD  
ALLERGIES NKDA MEDICATION HISTORY

HISTORY OF EVENT neon on MVA back seat unrestrained  
extricated from car

TREATMENT PRIOR TO ARRIVAL TO E.R.

AIRWAY: Oral Nasal E.T. E.O.A. 02  
IMMOBILIZATIONS/DRESSINGS: BACKBOARD CERVICAL COLLAR  
IV THERAPY (site/needle/solution/rate) RAC 18 NS  
IV INTAKE DURING TRANSPORT 400CC OUTPUT (type/amt.)

TREATMENT IN E.R. (CIRCLE OR DESCRIBE)

RESPIRATORY THERAPY/AIRWAY MAINTENANCE: TYPE Cuffed ET TUBE SIZE 6.0  
ORAL NASAL PERFORMED BY [REDACTED]  
X-RAYS: LOCATION: Chest PA & Lat Flat abd. Skull C-spine Portable  
Extremity OTHER To X-ray  
LABS (CIRCLE): CBC SGOT SGPT GLUCOSE TOX SCREEN - BLOOD/URINE U/A  
AMYLASE PT PTT BLOOD ALCOHOL LYTES BUN TYPE & CROSS AMT 2L  
ABG/CAP GASES PERFORMED BY [REDACTED] OTHER [REDACTED]  
EKG: LEAD II/XII Rhythm/Rate NSR - OCCASIONAL PVC

PROCEDURES

TIMES  
2140 NG TUBE: type Salem Sump size 18 FR inserted by [REDACTED]  
type suction Continuous drainage dark brown  
2207 URETHRAL CATH: type Foley size 16 FR inserted by [REDACTED]  
initial amt. obtained 100CC color/character clear yellow  
PERITONEAL/GASTRIC LAVAGE: inserted by sutures  
intake solution amount  
output - color/character amount  
CHEST TUBES: type inserted by location  
drainage - color/character  
rt. pressure lt. pressure  
C.V.P. LINE: size inserted by  
pressure location

15 Pt arrived per squad [redacted] SW [redacted] and [redacted] out to squad to assess pt unresponsive being bagged [redacted] Pt in minimal resp effort Pt began seizure closed to BBCC on stretcher transported to [redacted]

Pt. grand mal seizure emesis mouth suctioned Dark brown emesis CC and BB not properly placed C-spine maintained per [redacted] I V to @ Agilent infusing NS Abrasions to @ side of face @ [redacted] @ [redacted] eyes bruised swollen bruising abrasions to @ shoulder @ foot [redacted] Activan 3mg given IV @ [redacted] Res @ bedside bagging Pt placed on CK monitor @ 54 monitor

Takes dump per phlebot 18 Fr Salem sump OC placed per [redacted] RN placed V @ in air plus tape to [redacted]

Pentothal and Narcanol pushed IV Reading Pt for intubation 2cc IV line established @ hand 20mg per [redacted] RN

ETT placed @ 0 per [redacted] RT to cuff @ 22 Pt bagged @ Sat 100%. Chest expansion even abd soft @ pedals Cap 3 sec warming lights placed on Pt

NS infusing @ 150cc/hr thru @ hand @ AC IV line clamped saline locked [redacted] SW

Air gas obtained per [redacted] from @ chest receiving held Pt in [redacted] SR occasional RVCs Dr Ouida notified no further orders received Portable xray chest obtained for tube placement Latent Cy Spin and p/q's [redacted] also obtained

16 Fr Foley Cath placed balloon filled @ 5cc sterile saline 100cc clear yellow urine returned specimen sent to lab [redacted] Pt moving CK monitor → quad gemmine pulse present [redacted] notified





Date

Narcosis given TUP @ pedal pulses swelling  
to @ ankle ice rock-applied  
Pt hooked up to ventilator Rate 20 Resp 5  
Tidal volume 500 1500 ITC 1-2 IE 100% F<sub>1</sub>O<sub>2</sub>  
Duck bedside  
Gray @ @ Ankles obtained [redacted] @ bed  
NG T to continuous suction  
Able obtained per [redacted] C-collar repositioning  
[redacted] Pt reacting to painful  
stimuli  
Pt moving @ hand PVC's resist movement  
greater on @ side than @ side  
Ortho tech casting @ ankle Pt kicking  
@ leg after given TUP  
Cast to triphalves per Dr Powell  
Dr Frank @ bedside  
LE: @ AC TUP 1/2 shaded per J. Sanchez RN -

ADMITTED TO PHYSICIAN \_\_\_\_\_ ROOM # \_\_\_\_\_

TIME TO UNIT \_\_\_\_\_ REPORT GIVEN TO ICU RN

PERSONAL BELONGINGS: DESCRIPTION watch shoes

BELONGINGS GIVEN TO \_\_\_\_\_

DOCTORS PRESENT \_\_\_\_\_

NURSES PRESENT \_\_\_\_\_

PARENTS/FAMILY \_\_\_\_\_

SIGNATURE

(nurse recording trauma)

Date

Time

Pt still combative Versed given IV  
V/O Hemocult Neg. Pt

Pt kicking legs and arms Versed given IV  
V/O Pt relaxed

Chest Thoracic and Lumbar Spine Port.  
drags obtained

Pt combative again BB restraints used to  
keep Pt from pulling IV and ET tubes  
out

Versed given IV V/O

Readying pt for CT

Pt combative on CT bolus Ativan 4mg  
IV given V/O

Pt still moving too much for CT scan  
Mivacron 8mg IV V/O  
sat 100%

Pt moving again Mivacron 10mg given IV  
Re V/O

Pt ready for abd CT 143/67 P-145 Q sat  
20% occasional PVC's

Pt combative here to push contrast  
Vincuron 4mg given IV

B/P 143/39 P-145 Q sat 100%. Pt is quivering  
in stimulus occ. PVC's when not being  
manipulated

B/P 150/81 P-137 Q sat 100%. Pt is allergic  
reactive red rash to neck and chest

P bedside Benadryl 50mg given IV  
Pt being bagged per Dr. Vest taken  
to ED Rept called to ICU  
Rash fading BP stable Pt transferred  
to ICU

**PATIENT NAME:**  
**MR#:**

**DATE ADMITTED:**  
**ATTENDING PHYSICIAN:**

**ATTENDING RESIDENT:**

**HISTORY OF PRESENT ILLNESS:** This is an 11 year old white female who was involved in a motor vehicle accident with questionable details. Patient was unrestrained.

**PAST MEDICAL HISTORY:** Unobtainable.

**PHYSICAL EXAMINATION:** Vital signs stable. Temperature 37, saturations 100% on ventilator.

**HEENT:** Head - patient has abrasion to the left side of the face and head as well as a large hematoma of the left face and scalp. Eyes - pupils initially deviated to the right before paralyzation. Pupils were reactive and 4 mm. Nose with patent airway bilaterally. Ears - tympanic membranes unable to be visualized due to wax but no blood coming from the ear. Throat clear.

**NECK:** Trachea midline.  
**Supple. HEART:** Regular rate and rhythm.

**LUNGS:** Clear to auscultation with

symmetric expansion bilaterally. Soft, nondistended, nontender

**ABDOMEN:** Heme negative with good tone.  
when she was awake. Pelvic rock negative.

**RECTAL:** Patient was sedated and  
**NEUROLOGIC:** partially paralyzed. Pupils 4-5 mm and reactive. Glasgow coma scale approximately 9.

**EXTREMITIES:** Slight left arm contusion,  
otherwise unremarkable.

EKG shows normal sinus rhythm with occasional PVCs. Chest x-ray negative. C-spine negative. Thoracic spine negative. Lumbar spine negative. Pelvis negative. Right ankle with a medial malleolar fracture and questionable lateral malleolar fracture. Patient was seen by Orthopedic and had been casted. Blood gas; 7.38, 22.4, 153 PO2, bicarb 13.4, saturations 99. PT 54.1, PTT 27.9, hemoglobin 13.3, hematocrit 39, white count 22.8. Platelets 289,000. Sodium 147, potassium 3.3, chloride 109, CO2 14.7, BUN 13, creatinine 0.8. AST 179, ALT 120, glucose 177, amylase 20.

**IMPRESSION:** Motor vehicle accident.  
Closed head injury with questionable basal skull fracture as well as minor skull fractures with small amount of punctate bleeding

**HISTORY AND PHYSICAL EXAM**

**PATIENT NAME:**  
**MR#:**

lesions; nothing specific.  
Scalp hematoma.  
Rule out cardiac contusion.  
Right ankle fracture.

**PLAN:**

Patient will undergo CT of the abdomen. Head CT has been done as mentioned above. Patient is intubated and hyperventilated. NPO. Repeat EKG q8h. Bacitracin to abrasions. Recheck hemoglobin/hematocrit q4h x 3. Maintenance fluids. Patient was seen by [REDACTED]. She was seen by Orthopedics who will be following the ankle fracture. Patient was discussed with [REDACTED].  
[REDACTED]

PATIENT NAME:

MR#:

DATE ADMITTED:

DATE DISCHARGED:

ATTENDING PHYSICIAN:

ATTENDING RESIDENT:

ADMITTING DIAGNOSIS(ES):

Multiple trauma.  
Right medial malleolar  
fracture.  
Closed head injury.  
Left pneumothorax.  
Pulmonary contusion.

DISCHARGE DIAGNOSIS(ES):

Multiple trauma.  
Right medial malleolar  
fracture.  
Closed head injury.  
Left pneumothorax.  
Pulmonary contusion.

SURGICAL PROCEDURES:

Open reduction and internal  
fixation of right medial malleolus.

DISCHARGE INSTRUCTIONS:

The patient was given copy of  
home going instructions as well as follow-up appointment with [REDACTED]  
[REDACTED] in the office in approximately one week.

DISCHARGE MEDICATIONS:

None.

BRIEF HISTORY AND PHYSICAL:

Krista is an 11-year-old white  
female who was involved in a motor vehicle accident on [REDACTED].  
The patient was unrestrained. The patient did obtain a closed head  
injury.

PHYSICAL EXAMINATION:

Vital signs were stable. The  
patient was intubated and on a ventilator. There was an abrasion  
to the left side of the face as well as a large hematoma over the  
left face and scalp. Eyes - pupils initially were deviated to the  
right with poor parallelization. The pupils were reactive to 4 mm.  
Nose was with patent airways bilaterally. Ears - tympanic  
membranes were unable to be visualized due to wax, but no blood was  
coming from the ears. Neck - trachea was midline. Heart - regular  
rate and rhythm. Lungs - clear to auscultation. Extremities -  
slight left arm contusion and right ankle fracture. A copy of the  
patient's history and physical is available in the chart.

DISCHARGE SUMMARY

PATIENT NAME:

MR#:

HOSPITAL COURSE:

The patient was admitted on \_\_\_\_\_ with \_\_\_\_\_ consulting. The \_\_\_\_\_ had to rule out a basilar skull fracture. \_\_\_\_\_ was ruling out a blunt abdomen injury. Cervical spine was cleared by the \_\_\_\_\_ and the \_\_\_\_\_ ment was consulted on \_\_\_\_\_ and the patient had a right displaced medial malleolar fracture. We would recommend pinning at this time when lumbar spine, abdomen and skull have been cleared.

On \_\_\_\_\_, the patient was placed in a short leg cast at the time of admission by the \_\_\_\_\_ Toes were pink and she will need surgery on that ankle when cleared by \_\_\_\_\_ and \_\_\_\_\_

On \_\_\_\_\_ the patient was awake and able to follow commands. Toes were pink and warm and will take to surgery when medically cleared.

On \_\_\_\_\_ the patient was more alert and was transferred to the floor at this time. She will be taken to operating room on \_\_\_\_\_

On \_\_\_\_\_ the patient was awake and alert, no new changes noted and will schedule for surgery on \_\_\_\_\_

On \_\_\_\_\_ no other changes. Ordered MRI of the brain in the a.m.

On \_\_\_\_\_ the patient was awake and with no complaints with casting. Ordered \_\_\_\_\_ today and surgery in the a.m.

On \_\_\_\_\_ the patient was taken to surgery and to recover until stable and then to \_\_\_\_\_ There is a full copy of the surgical report available in the chart.

DISCHARGE SUMMARY



PATIENT NAME:

MR#:

On the patient was alert and awake with no pain with ankle. Toes were warm and pain. She was discharged to home in stable condition and instructions given.

PATIENT NAME:  
MR#:

DATE OF CONSULTATION:  
REQUESTING PHYSICIAN:  
CONSULTING PHYSICIAN:

HISTORY:

This is an 11-year-old female who was the unrestrained occupant of the back seat of a motor vehicle involved in a high speed head on collision. She was found in the back seat of the car reportedly groaning. She was extricated and transported by squad to On arrival here, she had a large emesis and a generalized tonic/clonic seizure simultaneously. She was pharmacologically paralyzed, intubated, and neurosurgical consultation was requested.

PHYSICAL EXAMINATION:

On examination, this is a large for age female who is paralyzed and intubated and hemodynamically stable. There are bilateral raccoon eyes, left side greater than right. There are left-sided forehead superficial lacerations and abrasions. There is a step off in the bone in the high left frontal area. The pupils are 3 mm and briskly reactive. The remainder of the neurological examination cannot be done secondary to the neuromuscular blockade.

The patient will undergo head CT scan and the paralytics will be allowed to wear off so we can examine her. I suspect that there is a high probability that we will find intracranial pathology associated with skull fracture that may require surgical intervention. Further recommendations will be forthcoming. In the interim, at this point in time, we would recommend maintaining moderate hyperventilation with pCO<sub>2</sub> of about 30, fluids at maintenance rate, and again, we will have further recommendations after the CT scan has been completed.

ADDENDUM:

As the patient's neuromuscular blockade has worn off, she has begun spontaneously moving all extremities appropriately. She does not open her eyes, however. She is tonguing at her ET tube and her OG tube. She is reaching up and grabbing at her tubes with both hands. She responds with localization and purposeful movements to noxious stimuli in all extremities. Her tone is normal and reflexes appear grossly normal.

We are still awaiting the head CT scan to determine whether or not surgery will be required for the frontal skull fracture.

PATIENT NAME:  
MR#:

DATE OF CONSULTATION:  
REQUESTING PHYSICIAN:

CONSULTING PHYSICIAN:  
CONSULTING RESIDENT:

CHIEF COMPLAINT:

HISTORY:

This patient was involved in a head-on motor vehicle accident this evening. Details of the accident are unknown although her sister was involved with near fatal injuries with closed head injury. She was brought in per squad as well. She was consulted as deformity of the right ankle with swelling showed a minimally 1 mm displaced medial malleolus fracture on the right with probable fracture of the lateral malleolus.

PHYSICAL EXAMINATION:

When I examined her she was paralyzed and intubated. Upper extremities did not appear to have any gross deformities although she did have some excoriations on her upper extremities. These are not deep and they do not appear to be oozing any blood. Pelvis is stable on pelvic rock. Hips had full range of motion passively. Thighs were not deformed and I placed her lower extremities through passive range of motion and did not see any other gross deformities. She had swelling over the medial and lateral malleolus of the right ankle. She had an excoriation over her anterior ankle area of the left ankle but there is no swelling over the malleoli and no deformity. Distal pulses are 2+. She was paralyzed and intubated. She did start to wake her up when I was placing her in a short-leg cast. She did show response to pain and movement in all extremities spontaneously but nothing cooperative. Spine has not been evaluated yet. She is getting emergent CT scan of her head as she was having seizures on presentation to the ER. She is immobilized in a C-collar and on a back board as well to take precautions since her spine has not been cleared yet. She will need spine x-rays this evening. Neurosurgery will be planning future therapy and treatment for her closed head injury. She was placed in a short-leg cast which was split anteriorly for right medial malleolar fractures. This was discussed with

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☒

CONSULT AND FOLLOW ☐

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

Vent management.

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

**Report of Consultant** (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

- 11yo WF involved in MVA this evening. Pt was unrestrained in back seat. Other details unknown. Had seizure at scene  
- PMH -  $\emptyset$  Med -  $\emptyset$  NKDA

PE - 37° 156/107 133 RR-15 Wt - est 40kg

HEENT - multiple abrasions + lacerations @ head

Pupils - 5-3mm equal @ Tris -  $\emptyset$  lacerations.

Neck - C-collar

Cv - tachy - RR.

Neuro - sedate, on vent

Lungs - CT @ equal @

mass etc. 4 ext.

Abd @ BS soft NT/no

Ext - @ ankle in cast

Med,

Renal

Phenytoin

EXAM - WSC @ PUC's. rare PUC, now on monitor.

CXRO Cipro @ PUC's @

Head CT - @ frontal fr.

Vent - iV-500 RR-15 .35% ITL-1.0 7338/43.0/62.1/22.7/-2.0.

APR - 11yo WF s/p MVA @ skull fr. (P) ankle fr. occ PUC, who is currently intubated. From discussion per Dr. Chapman pt does not need to be hyperventilated/or debr'd. Pt currently stable on vent. Will try not to over sedate + allow pt to wake up for possible extubation.

- Monitor for signs of  $\emptyset$  in new state,

- ✓ EXE

- Admin  $\rightarrow$  Bn  $\rightarrow$  stabilizing

SIGNATURE OF  
CONSULTANT:

SERVICE:

TIME:

DATE:

FORM 3303-66

CONSULTATION REPORT

CONSULTATION TO:  
(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

CHECK APPROPRIATE BOX: CONSULTATION ONLY: ☐

CONSULT AND FOLLOW ☐

ACCEPT FOR TRANSFER ☐

DIAGNOSIS AND INFORMATION DESIRED:

Otherwise well 11 yo WF involved in severe motor vehicle accident last pm (~2100 hrs) resulting in multiple skull fractures, facial contusions, chest trauma, and a fx of

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

The (R) medial malleolus. Noted to have somewhat frequent PVC's on admission to ER which have persisted until now. Urine output has been appropriate for size  
T37° P114 RR 30 BP 114/60 WT ~40kg

Centrally pink, perfusion good  
Pulses are strong throughout

(L) LU impulse, no thrill

S<sub>1</sub> and S<sub>2</sub> soft & split, no click or gallop

No murmur heard in systole or diastole

Liver edge soft, no evidence of enlargement

ECG - HR 105-120 rhythm sinus ~ relatively frequent uniform PVC's; no T wave abn or evidence of RBBB; no ST wave

Echo - Normal anatomy & relationships; normal symmetric LV contractility; no pericardial effusion; normal coronary artery origins. Normal aortic arch noted.

LABS: BUN 11 CR 0.6 Ca 8.8 Utes nl 140/119  
CK 650 CK-MB 0% Hct 36 4.8

WBC 19,200 Hyb 12.3 Platelets 190,000

CXR - Clear lung fields, no significant cardiac enlargement

IMP - Otherwise well 11 year old WF s/p MVA

Noted uniform PVC's only ~ nl CK-MB

Echo normal

While this may represent a mild myocardial contusion, cardiac function and status at this point are stable. It is also possible that the PVC's pre-date

SIGNATURE OF  
CONSULTANT: \_\_\_\_\_

SERVICE: \_\_\_\_\_

TIME: \_\_\_\_\_

DATE: \_\_\_\_\_

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This recent injury and are idiopathic.  
Would suggest

Repeat AM ECG'S  
Close observation

If by chance she develops runs of ventricular  
tachycardia, the drug of choice is lidocaine  
40mg IV bolus - through please notify.  
Will continue to follow in you

SIGNATURE OF  
CONSULTANT:

SERVICE:

TIME:

DATE:



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(SERVICE OR PHYSICIAN)

REQUESTED BY:  
(SERVICE OR PHYSICIAN)

DATE OF REQUEST:

TIME:

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DIAGNOSIS AND INFORMATION DESIRED:

UNIT CLERK TELEPHONED THE CONSULTANT, HIS SECRETARY OR ANSWERING SERVICE ON:

TIME:

Report of Consultant (PLEASE SIGN YOUR NAME, DATE AND TIME TO EACH CONSULTATION)

11 Yr old Wg Sig MVA

Wears Rx broke long ago

V-JS difficult  
Vx 1 JS opened with  
Demer retractor

Pupils V-2 reactive

SL4 nml

Abduction

X X

Motility seems normal

Intake

ECG shows no C. pulmonary  
eyes shut closed

Inf.) Vision seems normal

Motility also seems normal

she has a laceration of her lateral  
canthal angle which should heal  
with out any sutures she will  
probably have scarring of the Area  
due to the abrasion of the skin

Fundus 1/2 occluded

X X

Normal

1 (un) Flu in one week

Thanks!

SIGNATURE OF  
CONSULTANT: \_\_\_\_\_

SERVICE: \_\_\_\_\_

TIME: \_\_\_\_\_ DATE: \_\_\_\_\_

FORM 3303-66

CONSULTATION REPORT

---

MVA  
PCXR

---

KH

PORTABLE CHEST X-RAY:

Endotracheal tube tip is in the mid to lower thoracic trachea. Enteric tube courses through the stomach with its tip not included on the film, to the right of midline. Hazy right perihilar density extends into the right upper lobe with additional left perihilar density. Faint right lower lobe hazy density is also seen, all of which may represent pulmonary contusions. No pleural fluid is noted. No fracture is identified. Heart size is within normal limits. Left superior mediastinal border is prominent. Nasogastric tube is not displaced in the esophagus.

**IMPRESSION:** SMALL BILATERAL AREAS OF PULMONARY CONTUSION. PROMINENT LEFT SUPERIOR MEDIASTINUM. PA AND LATERAL CHEST X-RAY ARE INITIALLY SUGGESTED FOR FURTHER EVALUATION.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

---

MVA  
PCXR

---

KH

PORTABLE CHEST X-RAY:

Comparison is made to the film from earlier this day. Endotracheal tube tip is in the mid thoracic trachea. Enteric tube courses through the stomach to the right of midline with its tip not included on the film. Patchy bilateral areas of hazy density suggestive of contusions are most evident in the right upper lobe and left mid lung with lesser right lower lobe disease. Additional left perihilar consolidation is noted without interval change. Heart size is normal. Left superior mediastinal border is flat but appears less prominent than on the prior study with larger lung volumes. No pneumothorax and no pleural fluid are seen. Nasogastric tube is not displaced in the esophagus.

IMPRESSION: IMPROVED INSPIRATORY LEVEL WITHOUT INTERVAL CHANGE IN FAINT BILATERAL AREAS OF CONTUSION.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies. .

---

MULTIPLE TRAUMA  
AM PORT CXR    TUBE PLACEMENT

---

KH

PORTABLE CHEST:

Comparison is made to the film from one day earlier. Enteric tube courses through the stomach to the right of midline with its tip not included on the film. No displacement of the esophagus is noted. Heart size is normal. Mild prominence of the left superior mediastinal border is again noted with interval improvement due to improved lung volumes. Faint patchy areas of disease suggestive of contusions have improved in the left mid lung and right upper lobe with small amounts of persistent left perihilar and right lower lobe disease.

IMPRESSION:    SLIGHT IMPROVEMENT IN BILATERAL FAINT AREAS OF CONTUSION FOLLOWING EXTUBATION. QUESTIONED PROMINENCE OF LEFT SUPERIOR MEDIASTINUM LIKELY REFLECTS LOW INSPIRATORY LEVEL ON PRIOR STUDIES, BUT PA AND LATERAL CHEST X-RAY ARE SUGGESTED.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

---

CHEST 1 VIEW ONLY (AP/PA)  
CXR FOR FOLLOW UP PORTABLE NOW PLEASE

---

KH

PORTABLE CHEST:

Comparison is made to a film from earlier this day. Nasogastric tube is no longer seen. Patchy areas of lung density compatible with contusion have improved in the right upper lobe, right lower lobe, and left mid lung. A small amount of lateral pleural thickening or pleural fluid is seen in the upper lungs bilaterally. Heart size is within the upper limits of normal. Left superior mediastinum remains prominent.

IMPRESSION: GRADUALLY IMPROVING FAINT BILATERAL DENSITIES SUGGESTIVE OF CONTUSIONS. SMALL AMOUNT OF SYMMETRIC PLEURAL THICKENING OR PLEURAL FLUID.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

---

CXR FOLLOW UP PORTABLE AM

CHEST 1 VIEW ONLY (AP/PA)

---

KH

PORTABLE CHEST:

Comparison is made to a film from one day earlier. A large amount of new hazy density has developed in the right lung base with new obscuration of the right hemidiaphragm. Right pleural fluid is seen tracking laterally to a slight extent. Inspiratory level is low. Left perihilar density has developed, suggestive of atelectasis. No left pleural effusion is detected. Heart size is within the upper limits of normal. Superior left heart border remains prominent.

IMPRESSION: MODERATE RIGHT PLEURAL EFFUSION. LEFT PERIHILAR ATELECTASIS. TO EVALUATE FULLNESS OF THE SUPERIOR LEFT HEART BORDER, A PA AND LATERAL CHEST X-RAY ARE SUGGESTED, AS DISCUSSED WITH DR. ANAIN ONE DAY EARLIER.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.



---

MULTIPLE TRAUMA  
THORACIC SPINE

---

KH

THORACIC SPINE AP AND LATERAL:

Vertebral alignment is normal. No fracture or dislocation are identified. Disc spaces are well maintained.

IMPRESSION:      NORMAL STUDY.

LUMBOSACRAL SPINE AP AND LATERAL:

Vertebral alignment is normal. No fracture is identified. Disc spaces are well maintained.

IMPRESSION:      NORMAL STUDY.

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---

PORTABLE CXR TO BE DONE FOR F/U PT STATUS

CHEST 1 VIEW ONLY (AP/PA)

---

KH

AP PORTABLE CHEST:

Persistent opacity in lung bases appear slightly improved on the right from previous examination and right diaphragm is now clearly identified. No new disease is seen. Good size cardiopericardial silhouette is slightly improved from previous examination. No pneumothorax or pneumomediastinum is seen.

**IMPRESSION:** FINDINGS ARE CONSISTENT WITH BILATERAL BASILAR CONTUSIONS WITH IMPROVED AERATION OF RIGHT LUNG BASE.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

---

AP AND LAT RT ANKLE FOR PINNING

ANKLE AP/LAT OR PORT

---

KH

AP AND LATERAL PORTABLE VIEWS OF THE RIGHT ANKLE:

Two fixing pins are now seen across the medial malleolar fracture.  
Fracture fragments appear to be anatomically positioned.

IMPRESSION:        REDUCING PINS IN FRACTURE OF THE DISTAL RIGHT TIBIA.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

---

C-ARM RT ANKLE FOR ANKLE PINNING  
FLUORO TIME: 16 SECONDS

---

PORTABLE FLURO-1ST HOUR

KH

PORTABLE FLUOROSCOPY:

Sixteen seconds of fluoroscopy time was used in right ankle pinning. No spot views were obtained.

The following information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

NAME OF PATIENT		AGE 11	REFERRED BY	DATE OF EXAM
S.S.#	D.O.B.		HOSPITAL NAME	

CLINICAL HISTORY

**MRI OF THE BRAIN**

**Clinical History:** 10 year old female involved in motor vehicle accident with frontal fractures. The patient has had some confusion and this study is performed to evaluate for frontal lobe injury.

**Technical:** No sedation or IV contrast was administered. The following sequences were obtained:

1. SAGITTAL SE, TR 400, TE 15, SL 5MM.
2. AXIAL TSE, TR 3500, TE 19/93, SL 6MM.
3. AXIAL SE, TR 825, TE 22, SL 6MM.
4. CORONAL TSE, TR 3500, TE 19/93, SL 6MM.

**Findings:** Unfortunately the patient's orthodontic work causes considerable metallic artifact and distortion of the magnetic field in the region of the patient's frontal lobes. The magnetic artifact is minimized with TSE imaging. There are areas of high signal intensity in the inferior frontal lobes bilaterally. These probably represent areas of brain contusion but this is not definite since this is an area of distortion of the magnetic field. There are a focal areas of high signal intensity also in the posterior left temporal lobe and left frontal lobe near the insular cortex consistent with small area of contusion. The ventricles are normal in size and configuration. The pattern of myelination is otherwise appropriate. No mass effect on the brain is appreciated.

**IMPRESSION:**

THERE ARE AREAS OF ABNORMAL SIGNAL INTENSITY IN THE FRONTAL LOBES BILATERALLY. THESE PROBABLY REPRESENT AREAS OF CONTUSION BUT UNFORTUNATELY THERE IS CONSIDERABLE METALLIC ARTIFACT FROM THE PATIENT'S ORTHODONTIC WORK WHICH ALSO PROJECTS INTO THE FRONTAL LOBES. THERE ARE EVIDENCE OF SMALL CONTUSIONS IN THE POSTERIOR LEFT TEMPORAL LOBE AND AT THE LEFT FRONTAL LOBE.

PATIENT NAME:

MR#:

PROCEDURE DONE IN:

DATE OF PROCEDURE:

ATTENDING SURGEON:

RESIDENT SURGEON:

ANESTHESIA:

2% local Lidocaine

PREPROCEDURE DIAGNOSIS:

IV access and need for CVP  
monitoring and left  
pneumothorax.

POSTPROCEDURE DIAGNOSIS:

Same.

PROCEDURE:

Triple lumen catheter placement  
and left chest tube placement.

COMPLICATIONS:

From central line placement of  
left pneumothorax.

PROCEDURE:

The patient was prepped and draped in standard fashion using 2% Lidocaine. Using a #20 gauge needle, the left subclavian vein was cannulated in a single pass. There was good blood return. A guide wire was placed to the needle and the needle withdrawn. The catheter was placed over the guide wire in the subclavian vein. There was good blood return from all three ports and all three ports flushed easily. The line was secured in place with silk suture. Post-procedure chest x-ray revealed a left pneumothorax. A #20 French chest tube was placed between the 8th and 7th intercostal space. This was placed without difficulty. Chest x-ray confirmed good placement of the chest tube.

The above information is a part of the patient's medical record and should be maintained in a confidential manner consistent with medical record policies.

PROCEDURE NOTE



PATIENT NAME:  
MR#:

DATE OF SURGERY:

ATTENDING SURGEON:

ATTENDING RESIDENT SURGEON:

ANESTHESIA: General endotracheal.

PREOPERATIVE DIAGNOSIS: Displaced right medial malleolus fracture.

POSTOPERATIVE DIAGNOSIS: Displaced right medial malleolus fracture.

OPERATION: Open reduction and percutaneous pinning with one 0.062 and one 0.045 K wire.

ESTIMATED BLOOD LOSS:

TOURNIQUET SETTING: 275

INDICATIONS: This is an 11 year old female who was involved in a motor vehicle accident one week and a day ago sustaining the above named injury. She was placed in a short leg cast due to her closed head injury in which she had bifrontal contusions and small contusions scattered in her left hemisphere.

PROCEDURE: The patient was taken to the operating room and after satisfactory general anesthesia was induced, she was placed in the supine position. A tourniquet was placed on the right thigh. Her right lower extremity was prepped and draped in a sterile manner. A C-arm was used throughout the case. An attempt was made at closed reduction, but the fracture was displaced and did not reduce. After exsanguinating the limb with Esmarch exsanguination, the tourniquet was inflated to 275 mm of mercury. A skin incision was made over the medial malleolus and care was taken to protect the saphenous vein. Sharp dissection was carried down to the fracture fragment. The periosteum was elevated off the proximal portion of the medial malleolus to expose the entire fracture. The periosteum was elevated off the distal fragment as well and the soft tissue attachments were maintained. Hematoma was removed and irrigated out. The talus was inspected and did not appear to have any osteochondral lesions. Following further irrigation, a tenaculum was used to reduce the medial malleolus and hold this while two K wires were inserted. These were checked with C-arm guidance and anatomic reduction was obtained. The wound was irrigated thoroughly. Plain x-rays were taken which showed anatomic reduction of the fracture fragment. The periosteum was closed

OPERATIVE RECORD

PATIENT NAME:

MR#:

with 0 Vicryl suture. The subcutaneous tissues were closed with 2-0 interrupted Vicryl and then running 3-0 Vicryl subcuticular. Steri-Strips were then applied. The pins were cut off and bent on the outside of the skin and protected with pin covers and felt. A sterile bandage and Webril was then placed followed by a stockinette, Webril, and a short leg fiberglass cast.

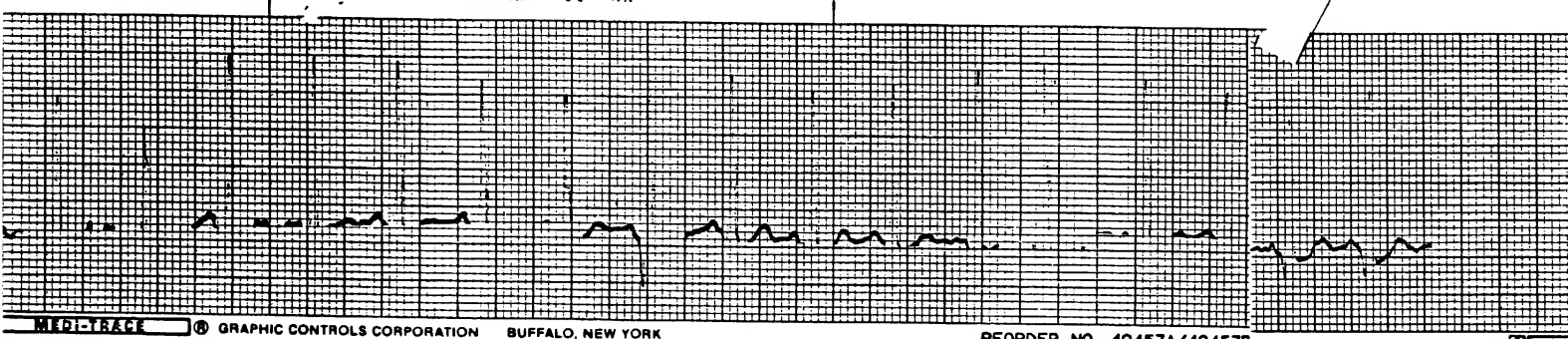
The patient tolerated the procedure well. Prior to placing the cast on, 0.25% Marcaine anesthesia was injected into the skin for postoperative pain control.

Dictated by:

Date	Time

Arrived from ER on cart, transferred to bed. Cervical Collar on. Oral ETT, 6.0, Secure to @ corner of mouth. Bear 2 Vent to ETT. Oral, 18 french gastric tube to L15, dk. brown fluid. Niplock @ antecubital. PIV @ hand infusing NS, IVF @ to D5 1/2 NS @ 20 meq KCL/L @ 70cc/1°. Demerol 25mg + Phenergan 12.5mg given for pain. Pulse oximeter + Transcutaneous monitor on. Bolus catheter to gravity, draining clear yellow urine. CR monitor on. Occasional PVC noted. ware of cardiac arrhythmia. ~~See strip~~ <sup>01</sup>

THAN II HR



REORDER NO. 40457A/40457B

Soft wrist restraints on for tube security. @ ankle in cast to knee. Toes pink, warm, Cap refill 2 seconds. (0200) BIS for lg amt. thick, chunky secretions, blood tinged. Abrasion @ face. Both eyes swollen, ecchymotic. @ eye 3mm, brisk reaction. Unable to assess @ eye due to edema. @ shoulder contusion. (0215) Dad + unable to room. Oriented to unit, explained monitors to expresses understanding, asks appropriate questions. (0315) Restless. EKG electrodes being placed. (0317) BIS for sm. amt. blood tinged thin secretions. Ativan 2mg given SIVP. Pt agitated @ procedure of EKG. Calms p Ativan. EKG done. Becomes agitated @ 0345. Requires holding to keep from sitting up in bed. Demerol 25mg given SIVP. (0355) Phenergan 12.5mg given SIVP. Zantac infusion started. NS @ 20 meq KCL bolus started TRA 33.3 for 3hrs = 100cc. Temp. 39.0 Rectally. Order rec'd for Tylenol from (0500) Restless. Tries to turn to side. (0510) Tylenol suppository inserted. (0600) Irritable, thrashing in bed. Called to room. Plans to extubate pt. in room. Update given.

[illegible]

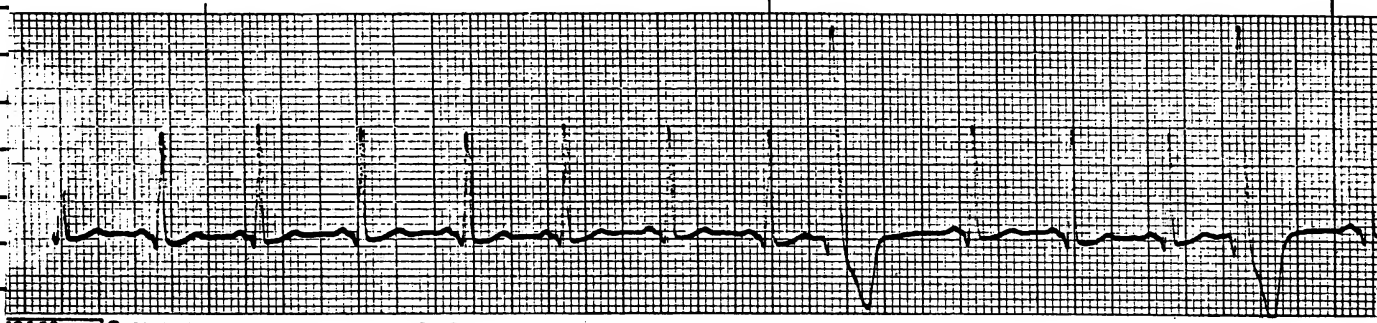
[illegible]





Date Time

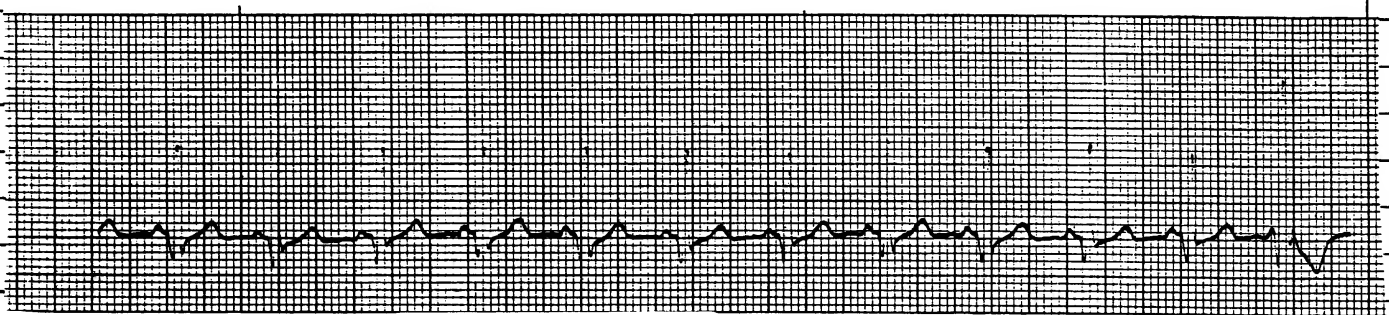
Report heard, care assumed. Pt in bed, eyes swollen shut, up bruised  
 dried blood on (L) side of face, lg reddened abrasion on (L) forehead  
 (B) hand PIV & mL. (L) hand PIV hep. locked. (B) ft casted  
 toes - knee, toes pink, warm, macs to skin. Pt mumbles to ?'s,  
 unable to understand. Restless, rolls side to side in bed.  
 Quiets when undisturbed. Family in & out a bs.



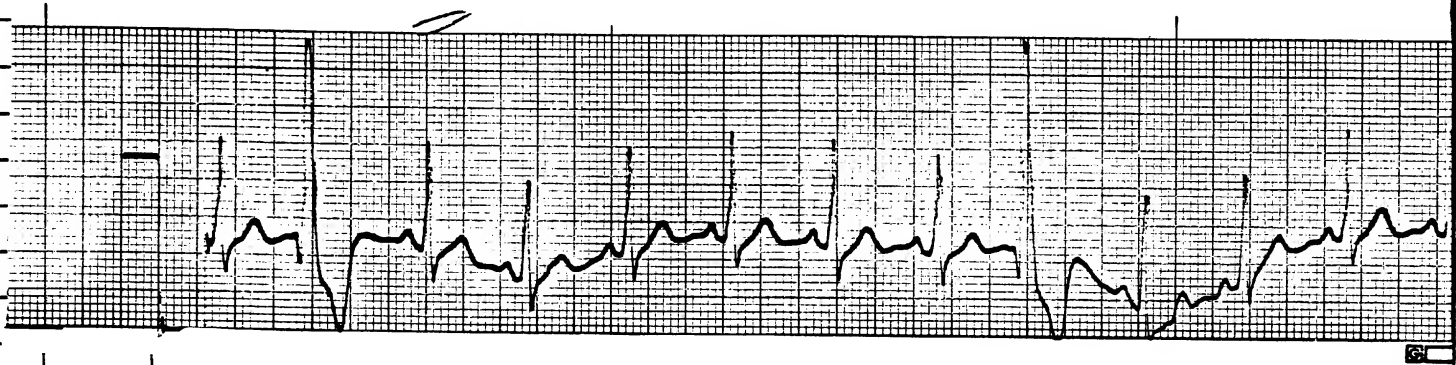
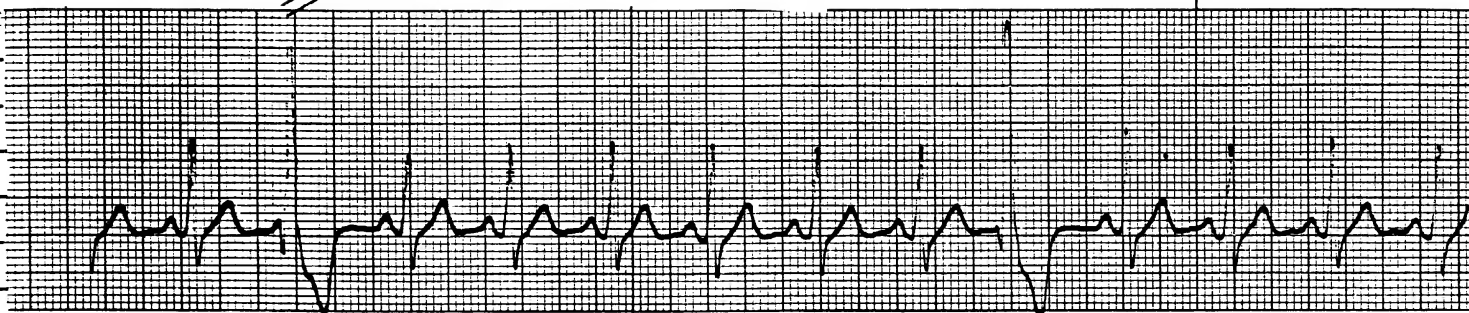
Resting quietly in bed. Cont & occas PVC's. No other AS.  
 (B) wrist ending & soft mechan immob. to protect PIV & fleg cath.  
 ↑ NO. Pt clb (B) leg pain. Given 25mg Demerol SLT. Pt is  
 restless, picks & casts fleg & (L) hand. Gr mother attempts  
 to calm (2215) Pt quiet, calm. Resp reg, easy  
 cont to sleep. Gr mother remains a bs. Occas spout and  
 fresh blood noted from abrasions over (L) eye (2340) Dr Ansin  
 in unit to see pt. Grs order for Plasmate 500s.  
 Blues started per (L) hand PIV to infuse 1/2". IV flushes  
 easily. Pt becoming wildly agitated. Occas says distorted  
 sentences "my leg hurts", then says "I did make the  
 shot". Pulls & fleg, retaped to leg. Sm amt bloody mucus  
 noted in tubing, urine clear yellow. (0035) Remains agitated  
 given Ativan 2mg SLT. (0100) Pt calm, quiet. Takes O2 @  
 Sats 69%, O2 replaced on face by RN. (0100) Pt agitated, given  
 25mg Demerol SLT then R (L) hand PIV & Plasm. blues  
 complete. IV flushes easily, hep. locked. T 38.3 Ax, given  
 650mg Tylenol PR (0230) Resting well, color good. Sat 93% &  
 1/4-l O2. (0330) Sats 68%, FiO2 ↑ 2-l. Pt sleeping soundly.  
 Sm laceration in (L) eyelid cut to bleed sm amt occas. RN  
 attempting to clean blood from face. Pt becoming agitated &  
 combative. Sats remain 88-90% & sleep, FiO2 ↑ 3-l. (cont) Davis R

Date	Time
(cont)	@ 07 <sup>00</sup> ) Sats remain 89%, FiO <sub>2</sub> 14½ L. Pt wakes & touchy "yells" "Leave me alone!" Sats 96-97%, FiO <sub>2</sub> → 2 L O <sub>2</sub> . Sm and bloody mucus noted in sputum, urine remains clear, yellow. Pt hitting @ RN, @ hand restrained. Resting well. Pt removed nasal cannula, sat 95% on RA.
i	Cont to sleep. AP strong, reg. Resp reg. easy.
	Awake, restless. Given 25mg Demerol SLIV for pain. Kicks legs. RN attempts to clean face, apply Bacitracin & do mouth care. Pt is agitated & combative. @bs.
s	Pt T↑, given 10mg Tylenol PR. Rests well.
	Cont to sleep. On I.L.O.R.N.C Report to

Date	Time	
		<p>Report Received (evening 11yr old female to area 249          Pica pt in bill numbered sn + 44 HON e 30' pt          sleeping, awakes to touch / voice. pt follows          simple command of (squeeze) hand &amp; wiggle toes          bilaterally. pt has fine elms noted, one unable to see          pupils, pt has ecchymosis noted to (L) face. reddened in color          &amp; abrasion noted. pt has ecchymosis noted to (L) back of          head. green &amp; color &amp; abrasion scattered. pt has          scattered abrasion noted to (L) side. pt has plastic          cast in place to (R) leg cast from toes to knee area          capillary quick, toes pink &amp; warm. pt will follow simple          commands, squeeze hands &amp; wiggle toes noted, pt speech          is at times garbled &amp; incoherent. pt has Foley in for urine          output, clear yellow urine. pt has Plw to (R) hand Hc.          pt has Plw to (R) AC &amp; MUF intensity weak, HON e 30'.          pt has e biline.</p> <p>pt continues to maintain no strip bilans</p>



		<p>Completed, pt as unchanged          Completed, pt sleeping awakes to touch. into aspt area          pt fine elms fine &amp; agitation sleep          pt fine Demand / phonetic to paper for both sides of          both both, mouth care, pc. Inters &amp; Hc, hair washed          Completed pt sleeping &amp; easy resp noted          pt as completed, pt as unchanged          Dr Howard is to do pt          to do pt eye, Cyclops 1/6 to eyes on pt eye          pt as unchanged, pt sleeping awakes to touch, pt MUF intensity weak,          Plw to (R) hand Hc, S. Sate 96% on RA, large unchanged &amp; noted          to buses &amp; RMC. Report to oncoming RD</p>
--	--	---



Moving about in bed frequently. Occas. calls out for help. Arouses easily but only oriented to "name" not to place or age. Bil. eyes remain edematous + unable to assess pupils. Remains patent. Continues to have arrhythmia - PVC's noted.

@ bedside for brief visit only.

O<sub>2</sub> set. Encouraged to cough & clearing of throat noted + O<sub>2</sub> set.

Lab here.

Report given to oncoming shift.

Date	Time	
		<p>Report received. Child lying in adult bed = HOB ↑ 30°. Heplock to @ hand &amp; address. PIV to @ AC = D5 1/2 NS @ 20 KCL infusing @ address or swelling. Bruising to @ arm. Abrasion to @ side face. Eyes &amp; periorbital edema. Unable to assess pupils do to this. Cast to mid-calf on @ leg. Foley to gravity, draining yellow urine. Abrasion to @ lower leg. Visitors at bedside. Awakens. Talking @ R. Speech clear. Oriented to person and time. States, she is in her room in her sister's bed. - Moving in bed. Moves arms and legs well. -</p> <p>at bedside examining eyes. P. able to read @ eye when eye held open. Able to see out of @ eye but blurry. Alvin given for agitation due to procedure.</p> <p>Sleeping.</p> <p>Restless. Demerol given. @ heplock leaking fluid. Pulled @ hand heplock. Awake. Yelling, kicking legs. -</p> <p>Sleeping.</p> <p>Sleeping. Tylenol given for fever. Bacitracin to @ side face abrasions.</p> <p>Resting. at bedside.</p> <p>Awakened briefly. Asks to get up and go to the bathroom. Cuddled her father.</p> <p>Report to</p> <p>Report received. In open bed = HOB ↑ 30°. Eyes edematous &amp; ecchymotic, abrasions noted - unable to open eyes to assess pupils. Cast to @ L leg dry &amp; intact, good circ. cks. to tow @ ft. PIV to @ antecubital @ D5 0.45 NS @ 20mg KCL/L @ 70cc/hr. Foley in place &amp; patent. Oriented to name &amp; age inappropriate to place.</p> <p>Occas. P/E noted per monitor.</p> <p>Continues to have PVC's. Responds easily to voice, oriented to name &amp; age, inappropriate response to place over p. telling pt. Asking to see face, unable to open eyes however.</p> <p>Returned to sleep &amp; quiet.</p> <p>No A in status. Responds to voice stimuli, oriented to "name" &amp; "age" not to "place".</p> <p>Returned to sleep quickly &amp; quiet.</p>

Date	Time	
		Pt. sleeps even & unlabeled resp. (500) Multiple at bedside. Pt. sleeps.
		bedside. Pt. aroused easily & BATO
		X3. Pt. dehydration, thirst or hunger. Pt. continues to have PR's brushed pt's hair. (1700) Pt. up to bedside to commode assistance + void dark yellow urine. (1730)
		Pt. receives dinner tray. at bedside to assist & meal.
		PIV in @ antecubital & erythema during zantac infusion, site 5 blood return & does not flush easily. P-t U Dc'd, pressure applied at site for over 5 mins due to slow clotting. (1800)
		notified of loss of IV access and Dc's all IV meds. Pt. eats 50% of chicken noodle soup & drinks punch. (1900) Pt. at Report to
		Report received. In open bed @ HOB 30°. Eyes remain edematous & unable to open. Pt. opens @ eye by holding open @ fingers only. Oriented x3, cooperative. Cost intact @ lower leg & dry, skin @'s to toes good. Facial abrasions noted @ face, no drainage noted. T.V. on for comfort.
		@ bedside & interacting well @ pt.
		up to B.S. commode. Bed & liner saturated @? void 100cc/commode.
		Cooperative. Drinking hot chocolate @ relative assist.
		Sleeping quietly. Easily aroused, oriented x3.
		Continues to sleep quietly. Arouses easily, oriented x3.
		Sleeping quietly. Easily aroused & oriented x3. No @ pain. Cost intact @ leg & good circulation. Also to toe @ ft.
		Incontinent of urine, linen @.
		Report given to
		Report received. Assessment per flow sheet Eyes ecchymotic & swollen. Child alert & appropriate Cost @ foot. Toes warm & PR's brisk cap refill.



Date

Time

occasional irregular beat.

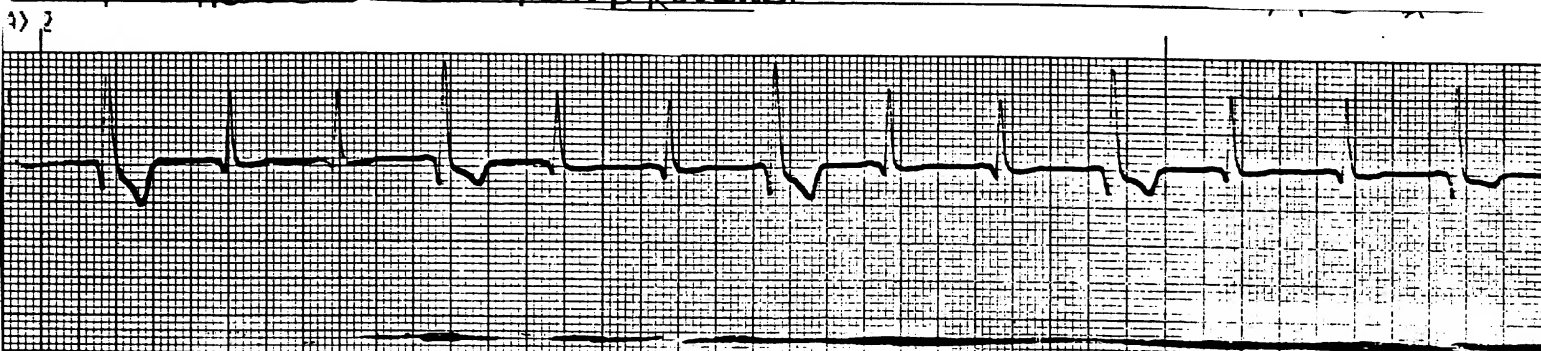
11

20



Remains easily aroused + appropriate.

Date	Time	
		Report from _____ sleep on R side & even turn about reg Pt's L face & large abrasions around eye & upper frontal forehead abrasions moist & Bacitracin, both eyes & erythema & edema, pupils unassessable RT edema. Pt. & PVC & every 3rd complex per CR monitor, strip follows.



cont'd. \_\_\_\_\_ aware of frequency of PVC's. Pt. not easily aroused & can not determine where she is & will not communicate well. leaves bedside to visit mom at MUM. Foley drains yellow urine & some sedimentation. Pt. L shoulder bruised as well as upper arm. Cast from knee to toe on R leg, toes pink & warm & brack cap. refil. (0810) \_\_\_\_\_ into examine pt. & is made aware of frequency in PVC's, he believes this probably is her baseline, will report to K. today (0820) Zantac infusion over 1/2 in PIU yd & MIUF. (0900) Pt. sitting upright in bed & requesting to walk down the hall to the bathroom. \_\_\_\_\_ assumes her to void that she has catheter in. Pt. & large stool over bed. (0930) All bed linen & Dd, including eggcrate mattress pad, pt. up to finish BM on bedside commode, pt. & steady gait, not needing a lot of assistance. (1000) Pt. back to bed p bath. Pt. believes that she is in hotel and states "Leave me alone, I'll wake up when I want to" Ortho resident at bedside & ask for R casted leg be elevated & ice pack. Pt. is very uncooperative & continually try to kick off ice pack tied to cast. (1030) Foley cath D'd, PIU depleted & AC of MIUF. (1100) \_\_\_\_\_ at bedside & examine pt. (1200) Pt. up to bedside commode to void & miss & void some on floor. \_\_\_\_\_ at bedside to help. (1300) Pt. drinks punch (1202) & receives lunch tray at side to help. (1330) \_\_\_\_\_ at bedside & forces eyes open to assess pupils & states pt. "no tonic R pupil." Pt. states pizza taste like cardboard & refuses to eat. →

Date	Time	
		Report received. Pt received awake in bed. Now able to open both eyes sl. Both eyes $\bar{c}$ edema, <del>black</del> <sup>small</sup> , purple, & yellowing to skin. Opens eyes to RN's voice. Nods yes to questions.
		to bedside. State pt is starting to talk. Bacitracin to abrasions @ side of skull. Lungs clear bilaterally. Abdomen soft, nondistended $\bar{c}$ active bowel sounds x 4. Eager to eat breakfast. Ate all fr. toast, all banana, all grape juice, $\frac{1}{2}$ milk.
		Left to go visit ..... Pt fell asleep.
		called from floor. Report given. In referred to .....

TIME

Awake alert: oriented x3 (knows who's in a hospital but can't remember name of it)  
 Surges CTA. Abd soft = B intact  
 to RLE. Toes @ foot warm: good cap refill.  
 Wiggles toes easily. States good hydration  
 to all toes. Incontinent of urine. An exam  
 done - Licens A.D.

into visit.  
 Incont of urine. Licens A.D.

members at bedside. No An  
 Visitors at bedside. No voice.

Watching TV. No An. Incont of urine -  
 Licens A.D.  
 Assisted to BR pr. - no weight bearing

at bedside.

On Bed. @ Side, resp. easy & equal NVS stable,  
 alert & oriented. Abrasion over (L) eye dry but drain out  
 applied. Ass to Cast to (R) foot intact & dry, toes are pink +  
 warm & good cap. refill, pt. wiggles freely. Denies discomfort of  
 L.Ds, up to BR to void S. bearing allow (C)

Resting quietly.  
 sleeping. sup on L.D. bed. Eyes closed & good drainage noted.  
 No. bearing with. Cast @ foot dry. (C) is in to get the foot good -  
 back up a fill, want to touch more well. No = 10 min. (C 200) playing.  
 improve drainage. Line in @ foot unchanged. (C 115) up to B.  
 rest 10.4 @ foot pain. (C) asked 10:00 in bed told nurse = 2 in door  
 distressed, asked if she was venturing out she said not now  
 got was thought the rest. Cool used (C 430) 5 feet to the green  
 @ pr @ foot pain. (C 500) playing. No further to pr. (C 600) playing  
 pr. non - unchanged. No explanation. Foot pain unchanged. Line  
 to line @ foot good & back up a fill, want to touch & move well.  
 cast took (C 10) playing. Area rest unchanged. — 1

## TIME

Arrived from PCH - received report from Pt alert  
 able to say full name, address - but forgets phone number  
 - bilateral hand grasps = in to sup pt  
 Lungs CTA, (+) Bowel sounds & H.L. Denies C/O  
 pain, both eyes deep purplish bruised & yellowing very  
 edematous but able to open slightly. Ate most of  
 Assessment unchanged - pt crying call light  
 under hand - states she has to use bathroom. Ask why she  
 didn't use call light - shrugged shoulders said she  
 didn't know. how at bedside - pt  
 snacking on Crime Soda & Cheese & crackers  
 in to visit - c here short time  
 Went to visit at Hospital. remains at  
 bedside. Assisted to BR x3 - NE myself -  
 necessary to hold (R) leg bent at knee so pt NWB  
 keep using Rt leg to ambulate - Ate 50% dinner  
 had eaten Cheese & crackers earlier.  
 remain at bedside - pt denies C/O pain. Report  
 given to oncoming.  
 Pt. awake, alert, able to say full name and address but  
 does not recall phone number. Pupils dem. PERLA.  
 Denies any discomfort. Both eyes bruised purplish in color,  
 edematous. Pt. able to follow finger & eyes. Call light at pt.  
 hand. Eating ice cream. at bedside. Signs of  
 distress. Talking easily & loud. Answers questions  
 appropriately. Speech clear. Watching T.V.  
 in assessment. Denies needs. Resting. Denies needs.  
 in NPO. Remains alert & oriented, answers questions  
 appropriately. Sleeping in bed. Cast on @ leg intact  
 CAP refill < 2 sec. Does wake to touch. Awakened, comforted  
 by. Denies any needs. No A's in assessment.

Just beginning breakfast & assist by. <sup>states</sup>  
 Didn't recognize her this morning, that this is not neces.  
 No signs of distress. Rt Lb not intact → 5 toes warm & quick  
 cap refill → pt able to move all 5 toes on command & 5  
 pain. Demeer any pain at this time. No drainage noted  
 from facial abrasions -

Took Tylenol 350 mg po for C/o cramps in Rt sm toe → no edema  
 or redness noted → no pressure marks from cast

Crying, shaking bed & sobs that sm toe is still hurting as  
 well as the foot below the sm toe and the Rt ankle →  
 no edema or pressure marks noted → NUS remain good. Pt  
 will not move toes on command. Rt High BP 120/40. Well  
 call with noendant → <sup>voiced understanding</sup> -

Notified of C/o pain by RN → ortho tech page by RN →  
 no immediate answer

in to see pt. Pt now smiling / talkative. No  
 C/o pain → split and spread of cast cancelled. <sup>states</sup>  
 Krista spoke & father on the phone and calmed down  
 to school classroom per

Sleeping. Rt leg remains -

in to see pt → spoke & aunt. <sup>to report</sup> pt  
 unable to recognize them this am but could this afternoon.  
 spoke of test pending -

for a ride in. No further C/o pain  
 in Rt foot → NUS remain good -

In bed @ <sup>error</sup> 12:00 watching TV. No C/o pain. able to  
 wiggle toes. S difficulty. talkative & pleasant.  
 Pt awake, bed bath done. Resp equal, unlabored, O<sub>2</sub> sat.  
 abd soft, flat, & BS. Short leg cast intact to @ lower leg, arc  
 ✓ is stable to toes of @ foot (< 5 sec cap refill). Both  
 eyes bruised above & below eye socket. Laceration noted  
 above @ eye, & drainage noted. Visitors @ bedside. Pt 5 C/o

Pt C/o @ leg pain, Tylenol given p.o.

Pt awake, visitors present, back in bed after  
 up in



TIME

Resting  
 awake, alert and oriented. GUL. Lot  
 present to sensation. Has cord to Rt foot.  
 Pt not able to feel sensation, neophyte doesn't  
 noticed blankie with.  
 further at 12:00. Pt. to have surgery in  
 AM and MNT.

now

20 MNT per cm C

Remains at MNT

Returned from MNT. now

Resting in bed. C/Ast intact @ leg. Cap refill & 2 x. Joles warm to  
 touch. Pt. talking, easing @. Alert & oriented. Accrations intact over  
 eyebrows. Denies any needs. Assisted to bathroom. Visitors  
 here. here visiting. Pt. smiling, talking

easing @ started in @ hand x 2 attempts  
 @ 24 gauge. Pt. tol. well. at bedside. Resting, no  
 A's. Pt. aware of NPO status after midnight. NAD.

Getting ready for bed. Alex any needs.

Pt asleep in bed. Resp equal, nondistressed, C/A brat.  
 Abd soft, flat, @ BS. @ lower leg @ cast intact, Joles  
 warm, dry. Eyes brat @ bruises noted, old lacerations  
 noted to forehead. IV heparin intact to @ hand. Pt NPO.

Sleeping. NAD.

Awake & up to use BR. Back to bed & difficulty. Assessment  
 und.

Continues to sleep. Remains NPO tonight

Wake, alert. Respirations unlabored & pink color  
denies Pain. NPO per order —  
Awake, visiting & family. Resp 20 unlabored. Pink color  
Denies pain in (R) foot. Pedal pulses present denies Pain  
IV (R) hand 5 redness & edema D5LR at 75% (L) eye red, small  
spot. Denies vision problems. NPO Pleasant & Cooperative  
ANS completed will continue to monitor I & Vital Signs  
neuro check completed Alert oriented & Clinical neuros —  
Intact. Equal strength in all extremities Alert to commands  
appropriately to conversation. (R) foot Pedal, & Capillary  
all extremities warm & Dist cap refill < 3 pulses  
pedal & radial. Ambulated to chair & minimal assistance  
steady gait.

Later entry 0800 L hand IV unwork to flush. IV D5LR  
and IV restarted.

Later entry 0845 IV restarted R hand 246 angio  
x2 attempts.

Further ed pedal. Anxious for surgery. Cast to R  
foot.

Ready for surgery. Do OR via cast.  
Further accompanying.

Back from surgery. D5LR infusing at 75% per Durst, sites  
3 redness or swelling. Wad at bedside. Cast intact (R) leg.  
Cap refill < 2 sec. Feet warm to touch. Denies any pain at  
this time. States she want dinner tonight. Dietary not bed.

Resting comfortably & complaint. States she is bored.

Pupils <sup>error</sup> = and reactive, oriented x3, bowel sounds present x4  
No c/o N/V. Cast intact on (R) leg. Moves toes, motor/  
sensory intact. States not hungry at this time, will  
try to eat later.

V&S stable. Assisted pt. to bathroom. Drinking 7up. POing well.  
No nausea. 200mg Tylenol & codeine for c/o discomfort  
in (R) ankle. 200mg Acet infusing per IV & diff. Starting to  
eat dinner. Family members in visiting at this  
time. Denies needs.

VS Completed. Alert, orientated x3. Cooperative. Resp' unlabored  
x16. Warm skin temp.  
Alert orientated x3. Cranial nerves I-VI intact. (R) & (L) pupils  
reactive & equal. Resp' 16 unlabored. Lungs clear bilaterally.  
Apical pulse regular at 80. (R) leg cast dry / intact. No  
edema, cyanosis, distal pain. C/O N / tingling of (R) 1st  
toe. Toes warm pink & quick cap refill. No change  
of color between both feet. Ambulated x2 w/ minimal  
assist. Steady gait & no weight bearing on (R) foot.  
Cast can be addressed. (R) leg elevated on pillow. RN  
notified of numbness / tingling. (R) hand IV D5K at  
5 redness or edema. A&S completed. Full ROM  
strength of upper & lower extremities. Will continue to monitor.

Interest, but does not need to see  
 at any more per  
 now. Not leg in cont. At last the  
 speak.  
 last PT.

Discharge PT. Crotchswalky complexed discharge  
some 2. See discharge sheet.  
verbalized understanding of discharge instructions.